Member Agencies:

Alameda

Albany

Berkeley

Dublin

Emeryville

Fremont

Hayward

Livermore

Newark

Oakland

Piedmont

Pleasanton

San Leandro

Union City

Alameda County

Alameda County Flood Control and Water Conservation District (District)

Zone 7 of the District

City of Emeryville
Fiscal Year 2009-2010 Annual Report of Stormwater Program Implementation

Alameda Countywide Clean Water Program
A Consortium of Local Agencies
http://www.cleanwaterprogram.org

Submitted to: Bruce Wolf
California Regional Water Quality Control Board
San Francisco Bay Region

September 15, 2010

CITY OF EMERYVILLE

INCORPORATED 1896

1333 PARK AVENUE
EMERYVILLE, CALIFORNIA 94608-3517

TEL: (510) 596-4300 FAX: (510) 596-4389

September 15, 2010

Bruce Wolfe, Executive Officer
San Francisco Regional Water Quality Control Board
1514 Clay Street
Oakland, CA 94612

SUBJECT: Annual Report for Fiscal Year 2009-2010 for the City of Emeryville

Dear Mr. Wolfe:

Enclosed herewith is the subject for the Fiscal Year 2009-2010 (months of July 2009 through June 2010). This is being submitted in accordance with the requirements of our NPDES permit.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Yours truly,

Maurice Kaufman
Public Works Director
City of Emeryville

Enc.

CITY OF EMERYVILLE

INCORPORATED 1896

1333 PARK AVENUE
EMERYVILLE, CALIFORNIA 94608-3517

TEL: (510) 596-4300 FAX: (510) 596-4389

September 13, 2010

Mr. Bruce Wolfe
Executive Officer
California Regional Water Quality Control Board,
San Francisco Bay Region
1515 Clay St., Suite 1400
Oakland, CA 94612

SUBJECT: SIGNATORY AUTHORITY AND CLEAN WATER PROGRAM MANAGEMENT COMMITTEE REPRESENTATIVE

Dear Mr. Wolfe:

Please be advised that Maurice Kaufman, Public Works Director, is duly authorized to sign all reports, certifications or other submittals required by the Regional Water Board and the Municipal Regional Stormwater Permit (NPDES Permit No. CAS612008 as may be amended, revised or reissued) on behalf of the City of Emeryville.

Karen Hemphill, Assistant to the City Manager, and Peter Schultze-Allen, Environmental Programs Analyst are also designated as the City of Emeryville's primary and alternate representatives respectively to the Alameda Countywide Clean Water Program Management Committee. This designation is made pursuant to the Agreement to Implement the Alameda Countywide Clean Water Program.

If you have any questions, Peter Schultze-Allen can be reached by telephone at 510-596-3728 or by email at pschultze-allen@emeryville.org. Karen Hemphill can be reached by telephone at 510-596-4372 or by email at khemphill@emeryville.org

Sincerely,

Patrick D. O'Keeffe
City Manager

cc: Jim Scanlin, ACCWP

Table of Contents

Section **Page**

Section 1 – Permittee Information

Background Information					
Permittee Name:	City of Emeryville				
Population:	10,062				
NPDES Permit No.:	CAS612008				
Order Number:	R2-2009-0074				
Reporting Time Period (month/year):	July / 2009 through June / 2010				
Name of the Responsible Authority:	Patrick D. O'Keeffe			**Title:**	City Manager
Mailing Address:	1333 Park Ave				
City:	Emeryville	**Zip Code:**	94608	**County:**	Alameda
Telephone Number:	510-596-4371		**Fax Number:**		
E-mail Address:	pokeeffe@emeryville.org				
Name of the Designated Stormwater Management Program Contact (if different from above):	Maurice Kaufman			**Title:**	Public Works Director
Department:	Public Works Department				
Mailing Address:	Same as above				
City:		**Zip Code:**		**County:**	
Telephone Number:	510-596-4334		**Fax Number:**		
E-mail Address:	mkaufman@emeryville.org				

Section 2 - Provision C.2 Reporting Municipal Operations

Program Highlights and Evaluation

Highlight/summarize activities for reporting year:

Summary: The City of Emeryville continues to train its municipal staff and upgrade equipment. We have a clean and well maintained City. We collect litter seven days a week. Two municipal staff members have been trained in Bay Friendly Landscaping maintenance and our newest park is one of the highest scoring BFL public parks in the county. The park has been the subject of tours and case studies as an exemplary model of a Bay Friendly park.

C.2.a. ►Street and Road Repair and Maintenance

Place an **X** in the boxes next to implemented BMPs to indicate that these BMPs were implemented in applicable instances. If not applicable, type **NA** in the box. If one or more of these BMPs were not adequately implemented during the reporting fiscal year then indicate so and provide explanation in the comments section below.

X	Control of debris and waste materials during road and parking lot installation, repaving or repair maintenance activities from polluting stormwater
X	Control of concrete slurry and wastewater, asphalt, pavement cutting, and other street and road maintenance materials and wastewater from discharging to storm drains from work sites.
X	Sweeping and/or vacuuming and other dry methods to remove debris, concrete, or sediment residues from work sites upon completion of work.

Comments: We are still working with private utilities like PG&E and EBMUD to make sure that they follow these BMPs as well.

C.2.b. ►Sidewalk/Plaza Maintenance and Pavement Washing

Place an **X** in the boxes next to implemented BMPs to indicate that these BMPs were implemented in applicable instances. If not applicable, type **NA** in the box. If one or more of these BMPs were not adequately implemented during the reporting fiscal year then indicate so and explain in the comments section below:

X	Control of wash water from pavement washing, mobile cleaning, pressure wash operations at parking lots, garages, trash areas, gas station fueling areas, and sidewalk and plaza cleaning activities from polluting stormwater
X	Implementation of the BASMAA Mobile Surface Cleaner Program BMPs

Comments: none.

C.2.c. ►Bridge and Structure Maintenance and Graffiti Removal

Place an **X** in the boxes next to implemented BMPs to indicate that these BMPs were implemented in applicable instances. If not applicable, type **NA** in the box. If one or more of these BMPs were not adequately implemented during the reporting fiscal year then indicate so and explain in the comments section below:

X	Control of discharges from bridge and structural maintenance activities directly over water or into storm drains
X	Control of discharges from graffiti removal activities
X	Proper disposal for wastes generated from bridge and structure maintenance and graffiti removal activities
X	Implementation of the BASMAA Mobile Surface Cleaner Program BMPs for graffiti removal

Comments: none.

C.2.d. ►Stormwater Pump Stations

Does your municipality own stormwater pump stations:		**Yes**	X	**No**

If your answer is **No** then skip to **C.2.e.**

C.2.e. ►Rural Public Works Construction and Maintenance

Does your municipality own/maintain rural[1] roads:		**Yes**	X	**No**

If your answer is **No** then skip to **C.2.f**.

[1] Rural means any watershed or portion thereof that is developed with large lot home-sites, such as one acre or larger, or with primarily agricultural, grazing or open space uses.

C.2.f. ►Corporation Yard BMP Implementation

Place an **X** in the boxes below that apply to your corporation yard(s):

	We do not have a corporation yard
	Our corporation yard is a filed NOI facility and regulated by the California State Industrial Stormwater NPDES General Permit
	We certify that we have a current **Stormwater Pollution Prevention Plan (SWPPP)** for the Corporation Yard(s)

Place an **X** in the boxes below next to implemented SWPPP BMPs to indicate that these BMPs were implemented in applicable instances. If not applicable, type **NA** in the box. If one or more of the BMPs were not adequately implemented during the reporting fiscal year then indicate so and explain in the comments section below:

X	Control of pollutant discharges to storm drains such as wash waters from cleaning vehicles and equipment
X	Routine inspection prior to the rainy seasons of corporation yard(s) to ensure non-stormwater discharges have not entered the storm drain system
	Containment of all vehicle and equipment wash areas through plumbing to sanitary or another collection method
X	Use of dry cleanup methods when cleaning debris and spills from corporation yard(s) or collection of all wash water and disposing of wash water to sanitary or other location where it does not impact surface or groundwater when wet cleanup methods are used
X	Cover and/or berm outdoor storage areas containing waste pollutants

Comments: The City of Emeryville's corporation yard is indoors. There is no stormwater exposure so neither a General Permit nor a SWPPP are needed. Vehicles are washed in an area that drains to adjacent landscape.

If you have a corporation yard(s) that is not an NOI facility, complete the following table for inspection results for your corporation yard(s) or attach a summary including the following information:

Corporation Yard Name	**Inspection Date** (1x/year required)	**Inspection Findings/Results**	**Follow-up Actions**
Emeryville Corp Yard	6/1/10	No stormwater risk	None.

Section 3 - Provision C.3 Reporting New Development and Redevelopment

C.3.a. ►New Development and Redevelopment Performance Standard Implementation Summary Report

Summary: The City of Emeryville continues to be a leader in the area of stormwater treatment in development projects. The City hosted a tour of completed projects with bay area agency representatives in conjunction with the San Francisco Estuary Partnership on June 9th, 2010.

C.3.b. ►Green Streets Status Report

(All projects to be completed by December 1, 2014)

On an annual basis (if applicable), report on the status of any pilot green street projects within your jurisdiction. For each completed project, report the capital costs, operation and maintenance costs, legal and procedural arrangements in place to address operation and maintenance and its associated costs, and the sustainable landscape measures incorporated in the project including, if relevant, the score from the Bay-Friendly Landscape Scorecard. [Note: this applies only to agencies planning to implement pilot green streets projects. If you are planning a pilot green streets project, summarize project status.]

Summary: In October of 2009, the City adopted a new general plan that designates new green streets, but none have been constructed yet as of June 2010.

C.3.b.v.(1) ►Regulated Projects Reporting Table

Fill in attached table **C.3.b.v.(1)** or attach your own table including the same information

C.3.h.iv. ► Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

(1) Fill in attached table **C.3.h.iv.(1)** or attach your own table including the same information

(2) On an annual basis, provide a discussion of the inspection findings for the year and any common problems encountered with various types of treatment systems and/or HM controls. This discussion should include a general comparison to the inspection findings from the previous year.

Summary: The City continues to mandate that all new construction projects, subject to treatment requirements, use vegetated systems for their stormwater treatment. It was expected when the City instituted this requirement that these systems would be easier to inspect than underground vault type systems and this has been shown to be true. However, there are still issues and property managers are sometimes slow to respond to City communications regarding maintenance. It can be difficult to get work done after the construction company has moved on and often problems only appear in the next rainy season after a project has been completed and the construction company is no longer in the picture. Property managers are often not well equipped with the knowledge or materials to deal with stormwater maintenance issues.

(3) On an annual basis, provide a discussion of the effectiveness of the O&M Program and any proposed changes to improve the O&M Program (e.g., changes in prioritization plan or frequency of O&M inspections, other changes to improve effectiveness program).
Summary: Our O&M program is effective. No changes are needed.

C.3.b.v.(1) ►Regulated Projects Reporting Table (part 1) – Projects Approved During the Fiscal Year Reporting Period

Project Name Project No.	Project Location[2], Street Address	Name of Developer	Project Phase No.[3]	Project Type & Description[4]	Project Watershed[5]	Total Site Area (Acres)	Total Area of Land Disturbed (Acres)	Total New and/or Replaced Impervious Surface Area[6] (ft^2)	Total Pre-Project Impervious Surface Area[7] (ft^2)	Total Post-Project Impervious Surface Area[8] (ft^2)
Private Projects										
EmeryStation Greenway	5812 Hollis @ Powell	Wareham Develop.		91,000 sq.ft. Biotech – Laboratory – Redevelopment	Temescal Creek and SF Bay	.92	.92	31,276	40,131	31,276
EmeryStation West	59th and Horton Street	Wareham Develop.		200,000 sq.ft. Mixed Use – biotech/lab TOD with parking and parking garage on adjacent site – Redevelopment Project	Temescal Creek and SF Bay	2.76	2.76	87,971	111,607	87,971
Krubiner Prefab House	5507 Beaudry Street	Seth Krubiner		Single Family Home – New Construction	Temescal Creek and SF Bay	.07	.07	1,887	0	1,887
Public Projects										
Triangle Traffic Calming	Adeline and adjacent streets	City of Emeryville		Pedestrian Safety Project with rain gardens in bulb outs	Temescal Creek and SF Bay	1.5	1.5	55,600	64,800	55,600

[2] Include cross streets.
[3] If a project is being constructed in phases, use a separate row entry for each phase.
[4] Project Type is the type of development (i.e., new and/or redevelopment). Example descriptions of development are: 5-story office building, residential with 160 single-family homes with five 4-story buildings to contain 200 condominiums, 100 unit 2-story shopping mall, mixed use retail and residential development (apartments), industrial warehouse.
[5] State the watershed(s) that the Regulated Project drains to. Optional but recommended: Also state the downstream watershed(s).
[6] State both the total new impervious surface area and the total replaced impervious surface area, as applicable.
[7] For redevelopment projects, state the pre-project impervious surface area.
[8] For redevelopment projects, state the post-project impervious surface area.

C.3.b.v.(1) ►Regulated Projects Reporting Table (part 2) – Projects Approved During the Fiscal Year Reporting Period

Project Name Project No.	Status of Project[9]	Source Control Measures[10]	Site Design Measures[11]	Treatment Systems Approved[12]	Operation & Maintenance Responsibility Mechanism[13]	Hydraulic Sizing Criteria[14]	Alternative Compliance Measures[15/16]	Alternative Certification[17]	HM Controls[18/19]
Private Projects									
EmeryStation Greenway	Approved by City Council May 2009	Operations indoors, Bay Friendly Landscaping	Pervious pavers and surfaces	Flow Through Planters	O&M Agreement with private landowner	1.b	Not required	Third Party Certification	Not required
EmeryStation West	Approved by City Council Feb. 2010	Operations indoors, Bay Friendly Landscaping	Pervious pavers and surfaces	Flow Through Planters	O&M Agreement with private landowner	1.b	Not required	Will have Third Party Certification	Not required
Krubiner Prefab House	Building Permit app received Feb 2010	Parking indoors, Bay Friendly Landscaping	Pervious pavers and surfaces	Green Roof and cisterns	O&M Agreement with private landowner	Not required	Not required	Not Required	Not required
Public Projects									
Triangle Traffic Calming	CC Aprvd June 2010	Bay Friendly Landscaping	None	Bioswales	City property	1.b	Not required	Not required	Not required

[9] For private projects, state project application submittal date; application deemed complete date; and, final discretionary approval date. For public projects, state plans and specifications approval date.
[10] List source control measures approved for the project. Examples include: properly designed trash storage areas; storm drain stenciling or signage; efficient landscape irrigation systems; etc.
[11] List site design measures approved for the project. Examples include: minimize impervious surfaces; conserve natural areas, including existing trees or other vegetation, and soils; construct sidewalks, walkways, and/or patios with permeable surfaces, etc.
[12] List all approved stormwater treatment system(s) to be installed onsite or at a joint stormwater treatment facility (e.g., flow through planter, bioretention facility, infiltration basin, etc.).
[13] List the legal mechanism(s) (e.g., O&M agreement with private landowner; O&M agreement with homeowners' association; O&M by public entity, etc…) that have been or will be used to assign responsibility for the maintenance of the post-construction stormwater treatment systems.
[14] See Provision C.3.d. "Numeric Sizing Criteria for Stormwater Treatment Systems" for list of hydraulic sizing design criteria (i.e., 1.a., 1.b., 2.a., 2.b., 2.c., or 3)
[15] For Alternative Compliance at an offsite location in accordance with Provision C.3.e.i.(1), on a separate page, give a discussion of the alternative compliance site including the information specified in Provision C.3.b.v.(1)(m)(i) for the offsite project.
[16] For Alternative Compliance by paying in-lieu fees in accordance with Provision C.3.e.i.(2), on a separate page, provide the information specified in Provision C.3.b.v.(1)(m)(ii) for the Regional Project.
[17] Note whether a third party was used to certify the project design complies with Provision C.3.d.
[18] If HM control is not required, state why not.
[19] If HM control is required, state control method used (e.g., method to design and size device(s) or method(s) used to meet the HM Standard, and description of device(s) or method(s) used, such as detention basin(s), biodetention unit(s), regional detention basin, or in-stream control).

C.3.h.iv. ►Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

Fill in table **below** or attach your own table including the same information.

Facility/Site Inspected and Location	Party Responsible[20] For Maintenance	Date of Inspection	Type of Inspection[21]	Type of Treatment/HM Control(s) Inspected[22]	Inspection Findings or Results[23]	Enforcement Action Taken[24]	Comments
AgeSong	Property Owner	6/9/10	Annual	Flow Through Planter, Green roof, Sand Filter	Flow Through planter need flow spreader	Spreader installed	
NHI	Property Owner	6/9/10	Annual	Flow Through Planters	Flow not being directed per plan	Flow diverter installed	Mini asphalt berm in parking lot
Glashaus	HOA	6/9/10	Annual	Flow Through Planters, Infiltration trench, Bioswales	Working	None	
Doyle Hollis Park	City	6/9/10	Annual	Bioretention areas	Irrigation line needs adjustment	Work w/ Contractor	
EmeryStation East	Property Owner	6/9/10	Annual	Flow Through Planters and Filtration vault	Filter cartridge and Bioswale maintenance	Calls and emails	

[20] State the responsible operator for installed stormwater treatment systems and HM controls.
[21] State the type of inspection (e.g., annual, follow-up, spot, etc.).
[22] State the type(s) of treatment systems inspected (e.g., bioretention facility, flow-through planter, infiltration basin, etc…) and the type(s) of HM controls inspected, and indicate whether the treatment system is an onsite, joint, or offsite system.
[23] State the inspection findings or results (e.g., proper installation, improper installation, proper O&M, immediate maintenance needed, etc.).
[24] State the enforcement action(s) taken, if any, as appropriate and consistent with your municipality's Enforcement Response Plan.

Section 4 – Provision C.4 Industrial and Commercial Site Controls

C.4.a.ii ► Legal Authority

(For FY 09-10 Annual Report only) Do you have adequate legal authority to obtain effective stormwater pollutant control on industrial sites?	X	**Yes**		**No**

C.4.c.ii.(5) ► Enforcement Response Plan

(For FY 09-10 Annual Report only) Have you developed and implemented an Enforcement Response Plan by April 1, 2010?	X	**Yes**		**No**

Program Highlights

Provide background information, highlights, trends, etc. For FY 09-10 Annual Report describe steps taken to revise your program to meet new data tracking and reporting requirements.

We have revised our procedures to incorporate the new 10 day violation response requirement. Since we are a small city with a small number of inspections and very few violations, the data requirements are not difficult to deal with.

C.4.b.i. ► Business Inspection Plan

(For FY 09-10 Annual Report only) Do you have a Business Inspection Plan?	X	**Yes**		**No**

C.4.b.iii.(1) ► Potential Facilities List

List below or attach your list of industrial and commercial facilities in your Inspection Plan to inspect that could reasonably be considered to cause or contribute to pollution of stormwater runoff.

Attached.

C.4.b.iii.(2) ►Facilities Scheduled for Inspection

List below or attach your list of facilities scheduled for inspection during the current fiscal year.

Attached.

C.4.c.iii.(1) ►Facility Inspections

Fill out the following table or attach a summary of the following information.

	Number	Percent
Number of businesses inspected (if known)	41	
Total number of inspections conducted	52	

Violations issued (excluding verbal warnings)	1	
Sites inspected in violation	1	100
Violations[1] resolved within 10 working days or otherwise deemed resolved in a longer but still timely manner	1	100

[1] Total number of violations equals the number of initial enforcement actions (i.e. one violation issued for several problems during an inspection at a site). It does not equal the total number of enforcement actions because one violation issued at a site may have a second enforcement action for the same violation at the next inspection if it is not corrected.

C.4.c.iii.(2) ►Frequency and Types/Categories of Violations Observed

Fill out the following table or attach a summary of the following information.

Type/Category of Violations Observed	Number of Violations
Actual discharge (e.g. non-stormwater discharge)	0
Potential discharge (e.g. BMPs not in place or ineffective)	1

C.4.c.iii.(2) ►Frequency and Type of Enforcement Conducted

Fill out the following table or attach a summary of the following information.

	Enforcement Action (as listed in ERP)[1]	Number of Enforcement Actions Taken	% of Enforcement Actions Taken[2]
Level 1	Verbal Warning	1	100
Level 2			
Level 3			
Level 4			
Total	**1**	1	100

Notes:

[1]Agencies to list specific enforcement actions as defined in their ERPs.

[2]Percentage calculated as number of each type of enforcement action divided by the total number of enforcement actions.

C.4.c.iii.(3) ►Types of Violations Noted by Business Category

Fill out the following table or attach a summary of the following information.

Business Category[1]	Actual Discharge Violations	Potential Discharge Violations
Retail	0	1

Notes:
[1] List your Program's standard business categories.

C.4.c.iii.(4) ►Non-Filers

List below or attach a list of the facilities required to have coverage under the Industrial General Permit but have not filed for coverage:
None.

C.4.d.iii ►Staff Training Summary

Training Name	Training Dates	Topics Covered	No. of Inspectors in Attendance	Percent of Inspectors in Attendance
Clean Water Program Inspector Training for Businesses and Illicit Discharges	October 15, 2009	Urban runoff pollution prevention, Inspection procedures, and Illicit Discharge Detection, Elimination and follow-up.	5	45%
Inspecting Industrial/ Commercial Facilities for Pollutants of Concern	June 2010	Sources and Control of copper, mercury and PCBs. Regulatory requirements, BMPs, Proper Disposal, Spill Management.	10	91%

Section 5 – Provision C.5 Illicit Discharge Detection and Elimination

C.5.a.ii ► Legal Authority

(For FY 09-10 Annual Report only) Do you have adequate legal authority to prohibit and control illicit discharges and escalate stricter enforcement to achieve expedient compliance?	X	**Yes**		**No**

C.5.b.ii.(4) ► Enforcement Response Plan

(For FY 09-10 Annual Report only) Have you developed and implemented an Enforcement Response Plan by April 1, 2010?	X	**Yes**		**No**

Program Highlights

Provide background information, highlights, trends, etc. For FY 09-10 Annual Report describe steps taken to revise your program to meet new data tracking and reporting requirements.

The City of Emeryville is continuing to improve the coordination between the Fire Department and Public Works regarding the response to and enforcement of illicit discharge incidents. The recent requirement to upgrade our enforcement and response plans in addition to changes in staff (a new Public Works director and new Fire Chief) has resulted in a more coordinated team. This is shown by the incident in November of 2009 related to a paint removal company working in the City detailed below.

C.5.c.iii ►Complaint and Spill Response Phone Number and Spill Contact List

List below or attach your complaint and spill response phone number and spill contact list.

Contact	Description	Phone Number
Fire Department	Emergency Number	911
Public Works Maintenance Department	Maintenance Superintendant or Crew Chief on duty	596-4341
Public Works Administration	Staff at City Hall during regular work hours	596-4300

C.5.d.iii ►Evaluation of Mobile Business Program

Describe implementation of minimum standards and BMPs for mobile businesses and your enforcement strategy. This may include participation in the BASMAA Mobile Surface Cleaners regional program or local activities.

Description: See Clean Water Program FY 2009/10 Report. See BASMAA FY 2009/10 report on mobile surface cleaners program.

C.5.e.iii ►Evaluation of Collection System Screening Program

Provide a summary or attach a summary of your collection screening program, a summary of problems found during collection system screening and any changes to the screening program this FY.

Description: Our Collection screening system has always been set up to monitor border areas where we have illegal dumping in street areas and the shoreline area where we have three outfalls, only one of which, however, is under our control. Our trash hot spot is at a public beach near the one outfall under our control and the City is currently negotiating with the Alameda County Flood Control district on the future maintenance of it.

C.5.f.iii.(1), (2), (3) ►Spill and Discharge Complaint Tracking

Spill and Discharge Complaint Tracking (fill out the following table or include an attachment of the following information)

	Number	Percentage
Discharges reported (C.5.f.iii.(1))	1	100
Discharges reaching storm drains and/or receiving waters (C.5.f.iii.(2))	1	100
Discharges resolved in a timely manner (C.5.f.iii.(3))	1	100

C.5.f.iii.(4) ►Summary of major types of discharges and complaints

Provide a narrative or attach a table and/or graph.

The City had one illicit discharge in FY 09/10 that reached a storm drain. A paint removal company was power washing the paint off of a masonry building, capturing the effluent, filtering out the solids and releasing the water into a stormdrain. The Fire department noticed the contractor working, responded and called Public Works, Fish and Game and CAL EMA. The storm drain line was cleaned down to the extent of the spill, so no discharge reached the bay.

Section 6 – Provision C.6 Construction Site Controls

C.6.a.iii ► Legal Authority

(For FY 09-10 Annual Report only) Is your agency's legal authority adequate for C.6 compliance?	X	**Yes**		**No**

C.6.b.ii.(3) ► Enforcement Response Plan

(For FY 09-10 Annual Report only) Was your Enforcement Response Plan developed and implemented by April 1, 2010?	X	**Yes**		**No**

C.6.e.iii.1.a, b, c ►Site/Inspection Totals

Number of sites disturbing < 1 acre of soil requiring storm water runoff quality inspection (i.e. High Priority) (C.6.e.iii.1.a)	**Number of sites disturbing ≥ 1 acre of soil** (C.6.e.iii.1.b)	**Total number of storm water runoff quality inspections conducted** (C.6.e.iii.1.c)
0	1	5

C.6.e.iii.1.d ►Construction Activities Storm Water Violations

BMP Category	Number of Violations[1]	% of Total Violations[2]
Erosion Control	0	0
Run-on and Run-off Control	0	0
Sediment Control	0	0
Active Treatment Systems	1	100
Good Site Management	0	0
Non Stormwater Management	0	0
Total		**100%**

Notes:

[1]Count one violation in a category for each site and inspection regardless of how many violations/problems occurred in the BMP category.

[2]Percentage calculated as number of violations in each category divided by total number of violations in all six categories.

C.6.e.iii.1.e ►Construction related storm water enforcement actions

	Enforcement Action (as listed in ERP)[1]	Number Enforcement Actions Taken	% Enforcement Actions Taken[2]
Level 1	Written Warning	1	100
Level 2		0	0
Level 3		0	0
Level 4		0	0
Total		**1**	**100%**

Notes:

[1]Agencies should list the specific enforcement actions as defined in their ERPs.

[2]Percentage calculated as number of each type of enforcement action divided by the total number of enforcement actions.

C.6.e.iii.1.f, g ►Illicit Discharges

	Number
Number of illicit discharges, actual and those inferred through evidence (C.6.e.iii.1.f)	0
Number of sites with discharges, actual and those inferred through evidence (C.6.e.iii.1.g)	0

C.6.e.iii.1.h, i ►Violation Correction Times

	Number	Percent
Violations fully corrected within 10 business days after violations are discovered or otherwise considered corrected in a timely period (C.6.e.iii.1.h)	1	100%[2]
Violations not fully corrected within 30 days after violations are discovered (C.6.e.iii.1.i)	0	0%[3]
Total number of violations for the reporting year[1]	1	100%

Notes:

[1]Total number of violations equals the number of initial enforcement actions (i.e. one violation issued for several problems during an inspection at a site). It does not equal the total number of enforcement actions because one violation issued at a site may have a second enforcement action for the same violation at the next inspection if it is not corrected.

[2]Calculated as number of violations fully corrected in a timely period after the violations are discovered divided by the total number of violations for the reporting year.

[3]Calculated as number of violations not fully corrected within 30 days after the violations are discovered divided by the total number of violations for the reporting year.

C.6.e.iii.(2) ►Evaluation of Inspection Data

Describe your evaluation of the tracking data and data summaries and provide information on the evaluation results (e.g., data trends, typical BMP performance issues, comparisons to previous years, etc.).

Description: Due to the decreased activity in the Building sector, there are fewer sites to monitor and inspect resulting in fewer violations and better enforcement.

C.6.e.iii.(2) ►Evaluation of Inspection Program Effectiveness

Describe what appear to be your program's strengths and weaknesses, and identify needed improvements, including education and outreach.

Description: We have good communications between the different departments because of our size, team approach and respect between department heads.

C.6.f ►Staff Training Summary

Training Name	Training Dates	Topics Covered	No. of Inspectors in Attendance	Percent of Inspectors in Attendance
Clean Water Program Training the Trainers Session on MRP Construction Site Inspection Requirements	March 9, 2010	Permit requirements, ERP requirements, tools for construction site inspections and tracking	1	50%
San Francisco Estuary Partnership's Construction Stormwater Management Compliance Workshop	January 26, 2010	New Construction Permit and Issues	1	50%
		Total	2	100%

Section 7 – Provision C.7. Public Information and Outreach

C.7.b.ii.1 ►Advertising Campaign

Summarize advertising efforts. Include details such as messages, creative developed, and outreach media used. The detailed advertising report may be included as an attachment. If advertising is being done by participation in a countywide or regional program, refer to the separate countywide or regional Annual Report.

Summary: See BASMAA FY 2009/10 report on the BASMAA Regional Advertising Campaign.

C.7.c ►Media Relations

Summarize the media relations effort. Include the following details for each media pitch in the space below, AND/OR refer to a regional report that includes these details:

- Topic and content of pitch
- Medium (TV, radio, print, online)
- Date of publication/broadcast

Summary: See BASMAA FY 2009/10 report on the Regional Media Relations effort.

C.7.d ►Stormwater Point of Contact

(For FY 09-10 Annual Report only, unless changes made) Provide details of website or phone number used as the point of contact. Report on how the point of contact is publicized and maintained. If any change occurs in this contact, report in a subsequent Annual Report.

Contact Summary: See BASMAA FY 2009/10 report on the Regional point of contact. See Clean Water Program FY 2009/10 Report for details on countywide point of contact.

Local Emeryville Contact: Peter Schultze-Allen, Environmental Programs Analyst. Email from website goes to whoever is current staff.

C.7.e ►Public Outreach Events

Describe general approach to event selection. Provide a list of outreach materials and giveaways distributed.

Use the following table for reporting and evaluating public outreach events

Event Details	**Description** (messages, audience)	**Evaluation of Effectiveness**
Provide event name, date, and location. Indicate if event is local, countywide or regional.	Identify type of event (e.g., school fair, farmers market etc.), type of audience (school children, gardeners, homeowners etc.) and outreach messages (e.g., Enviroscape presentation, pesticides, stormwater awareness)	Provide general staff feedback on the event (e.g., success at reaching a broad spectrum of the community, well attended, good opportunity to talk to gardeners etc.). Provide other details such as:

		• Estimated overall attendance at the event. • Number of people that visited the booth, comparison with previous years • Number of brochures and giveaways distributed • Results of any spot surveys conducted
Clean Water Program exhibit at the Alameda County Fair (countywide event).	See Clean Water Program FY 2009/10 Report.	See Clean Water Program FY 2009/10 Report.
Emeryville Coastal Cleanup Day – Sept. 2009	Over 100 people helped pick up litter	Attendance and Volume of material picked up
Emeryville Earth Day – April 2010, at the City's new Doyle Hollis Park	Over 1000 people attended fair with educational booths, music, games & food.	Checked people's knowledge of waste with game and handed out educational materials

C.7.f. ►Watershed Stewardship Collaborative Efforts

Summarize watershed stewardship collaborative efforts and/or refer to a regional report that provides details. Describe the level of effort and support given (e.g., funding only, active participation etc.). State efforts undertaken and the results of these efforts. If this activity is done regionally refer to a regional report.

Evaluate effectiveness by describing the following:

- Efforts undertaken
- Major accomplishments

Summary: See Clean Water Program FY 2009/10 Report.

The City of Emeryville's Coastal Cleanup day is our watershed awareness event in September of each year.

C.7.g. ►Citizen Involvement Events

List the types of events conducted (e.g., creek clean up, storm drain inlet marking, native gardening etc.). Use the following table for reporting and evaluating citizen involvement events.

Event Details	Description	Evaluation of effectiveness
Provide event name, date, and location. Indicate if event is local, countywide or regional	Describe activity (e.g., creek clean-up, storm drain marking etc.)	Provide general staff feedback on the event. Provide other evaluation details such as: • Number of participants. Any change in participation from previous years. • Distance of creek or water body cleaned • Quantity of trash/recyclables collected (weight or volume). • Number of inlets marked. • Data trends
Community Stewardship Grants	See Clean Water Program FY 2009/10 Report.	See Clean Water Program FY 2009/10 Report.
City of Emeryville Coastal Cleanup Day, September 2009, Shoreline areas of City.	Clean up of shoreline	The City uses number of attendees and volume of material collected. Number of attendees has been rising, but volumes have been dropping.

C.7.h. ►School-Age Children Outreach

Summarize school-age children outreach programs implemented. A detailed report may be included as an attachment.
Use the following table for reporting school-age children outreach efforts.

Program Details	Focus & Short Description	Number of Students/Teachers reached	Evaluation of Effectiveness
Provide the following information: Name Grade or level (elementary/ middle/ high)	Brief description, messages, methods of outreach used	Provide number or participants	Provide agency staff feedback. Report any other evaluation methods used (quiz, teacher feedback etc.). Attach evaluation summary if applicable.
Educational Services	See Clean Water Program FY 2009/10 Report.		

Section 8 - Provision C.8 Water Quality Monitoring

C.8 ►Water Quality Monitoring
State below if information is reported in a separate regional report. Municipalities can also describe below any Water Quality Monitoring activities in which they participate directly, e.g. participation in RMP workgroups, fieldwork within their jurisdictions, etc.
Summary: See BASMAA MRP Regional Supplement for POCs and Monitoring Annual Reporting for FY 2009/2010.

Section 9 – Provision C.9 Pesticides Toxicity Controls

C.9.a ►Adopt an Integrated Pest Management (IPM) Policy or Ordinance

(For FY 09-10 Annual Report only) Attach a copy of your individual IPM ordinance or policy.	X	**Attached**		**Not attached**, explain below

C.9.b ►Implement IPM Policy or Ordinance

Report implementation of IPM BMPs by showing trends in quantities and types of pesticides used, and suggest reasons for increases in use of pesticides that threaten water quality, specifically organophosphorous pesticides, pyrethroids, carbaryl, and fipronil. A separate report can be attached as evidence of your implementation.

Summary: The amount and types of pesticides being used by City contractors has been decreasing as the Bay Friendly requirements are implemented. Recently a new product was approved from the OMRI list of

C.9.c ►Train Municipal Employees

Enter the number of employees that applied or used pesticides (including herbicides) within the scope of their duties this reporting year.	0
Enter the number of these employees who received training on your IPM policy and IPM standard operating procedures within the last 3 years.	4
Enter the percentage of municipal employees who apply pesticides who have received training in the IPM policy and IPM standard operating procedures within the last three years.	Not applicable

C.9.d ►Require Contractors to Implement IPM

Did your municipality contract with any pesticide service provider in the reporting year?	X	**Yes**		**No**

If yes, attach one of the following:

X	Contract specifications that require adherence to your IPM policy and standard operating procedures, OR
	Copy(ies) of the contractors' IPM certification(s) or equivalent, OR
	Equivalent documentation.

If not attached, explain:

C.9.e ►Track and Participate in Relevant Regulatory Processes

Summarize participation efforts, information submitted, and how regulatory actions were affected **OR** reference a regional report that summarizes regional participation efforts, information submitted, and how regulatory actions were affected.

Summary: See BASMAA MRP Regional Supplement for POCs and Monitoring Annual Reporting for FY 2009/2010.

C.9.f ►Interface with County Agricultural Commissioners

Provide a summary of improper pesticide usage reported to County Agricultural Commissioners and follow-up actions to correct violations, if any. A separate report can be attached as your summary.

Summary:

None reported.

C.9.h.ii ►Public Outreach: Point of Purchase

Provide a summary of public outreach at point of purchase, and any measurable awareness and behavior changes resulting from outreach (here or in a separate report); **OR** reference a report of a regional effort for public outreach in which your agency participates.

Summary: See description of Our Water Our World activities in the Clean Water Program FY 2009/10 Report. See BASMAA FY 2009/10 report on the Our Water Our World program.

C.9.h.vi ►Public Outreach: Pest Control Operators

Provide a summary of public outreach to pest control operators and landscapers and reduced pesticide use (here or in a separate report); OR reference a report of a regional effort for outreach to pest control operators and landscapers in which your agency participates.

Summary: See Clean Water Program FY 2009/10 Report.

Section 10 - Provision C.10 Trash Load Reduction

C.10.b.iii ►Trash Hot Spot Assessment

(For FY 10-11 Annual Report and Each Annual Report Thereafter) Provide volume of material removed from each Trash Hot Spot cleanup, and the dominant types of trash (e.g., glass, plastics, paper) removed and their sources to the extent possible. Provide required photo documentation.

Fill out the following table or attach a summary of the following information.

Trash Hot Spot	Cleanup Date	Volume of Material Removed	Dominant Type of Trash	Trash Sources (where possible)
Shorebird Park on Frontage Road north of Powell	Cleanup will Start in FY 10-11	n/a	n/a	n/a

C.10.d ►Summary of Trash Load Reduction Actions

Provide summary of new trash load reduction actions or increased levels of implementation of existing actions that were implemented after adoption of the MRP (control measures and best management practices) including the types of actions and levels of implementation, and the total trash loads and dominant types of trash removed from each type of action.

Suggested trash load reduction actions to track and report may include:

- Anti-litter Campaigns
- Anti-litter/Dumping Enforcement Activities
- Curbside Recycling Programs
- Education and Outreach Efforts
- Free Trash Pickup/Drop-off Days
- County HHW Program Activities
- Improved Trash Bin Management
- Inspection/Maintenance of Storm Drain Outfalls
- Litter Pickup and Control
- Removal of Homeless Encampments
- Solid Waste Recycling Efforts
- Source Controls/Bans/Prohibitions
- Storm Drain Operation and Maintenance
- Storm Drain Signage/Marking
- Street Sweeping Activities
- Trash Removal from Receptacles
- Volunteer Creek Cleanups

Type of Trash Load Reduction Action	Date of First Implementation	Level of Implementation (specify if level was increased after MRP adoption)	Total Trash Load Removed by Action	Dominant Types of Trash Removed by Action
Battery Take Back program	April 2010	New program	n/a	Batteries
Additional Litter Containers in City	On-going	As development occurs projects are required to install new containers in sidewalk areas around building	n/a	Litter

Section 11 - Provision C.11 Mercury Controls

C.11.a.i ►Mercury Recycling Efforts
List below or attach lists of efforts to promote, facilitate, and/or participate in collection and recycling of mercury containing devices and equipment at the consumer level (e.g., thermometers, thermostats, switches, bulbs).
A Battery take back program was initiated at the April 2010 Emeryville Earth Day event. The 2010 Shoreline cleanup will also have a battery take back program. The New Franchise agreement proposed in draft to take effect on Jan.1, 2011 will have curbside battery recycling for single family residences, mail back option for multi-family residences and a mail back program for compact fluorescent lamps for all residences. City and School district buildings will also have mail back programs for batteries and CFL's.

C.11.a.ii ►Mercury Collection
Provide an estimate of the mass of mercury collected through these efforts, or provide a reference to a report containing this estimate.
Amount collected: Not available yet.

C.11.b ►Monitor Methylmercury C.11.c ►Pilot Projects to Investigate and Abate Mercury Sources in Drainages C.11.d ►Pilot Projects to Evaluate and Enhance Municipal Sediment Removal and Management Practices C.11.e ►Conduct Pilot Projects to Evaluate On-Site Stormwater Treatment via Retrofit C.11.f ►Diversion of Dry Weather and First Flush Flows to POTWs C.11.g ►Monitor Stormwater Mercury Pollutant Loads and Loads Reduced C.11.h ►Fate and Transport Study of Mercury In Urban Runoff C.11.i ►Development of a Risk Reduction Program Implemented Throughout the Region C.11.j ►Develop Allocation Sharing Scheme with Caltrans
State below if information is reported in a separate regional report. Municipalities that participate directly in regional activities to can provide descriptions below.
Summary: See BASMAA MRP Regional Supplement for POCs and Monitoring Annual Reporting for FY 2009/2010.

Section 12 - Provision C.12 PCBs Controls

C.12.a.i,iii ►Municipal Inspectors Training

(For FY 09-10 Annual Report only) List below or attach description of results of training municipal industrial inspectors to identify, in the course of their existing inspections, PCBs or PCB-containing equipment.

Description: See Clean Water Program FY 2009/10 Report.

In June of 2010, 10 out of 11(91%) of the City's contracted inspectors were trained using the PowerPoint presentation "Inspecting Industrial/Commercial Facilities for Pollutants of Concern" and the Pollutants of Concern Stormwater Inspector's Guidance Manual.

C.12.a.ii,iii ►Ongoing Training

(For FY 10-11 Annual Report and Each Annual Report Thereafter) List below or attach description of ongoing training development and inspections for PCB identification, including documentation and referral to appropriate regulatory agencies (e.g. county health departments, Department of Toxic Substances Control, California Department of Public Health, and the Water Board) as necessary.

Description: The City will continue to train inspectors as new programs are developed.

C.12.b ►Conduct Pilot Projects to Evaluate Managing PCB-Containing Materials and Wastes during Building Demolition and Renovation Activities
C.12.c ►Pilot Projects to Investigate and Abate On-land Locations with Elevated PCB Concentrations
C.12.d ►Conduct Pilot Projects to Evaluate and Enhance Municipal Sediment Removal and Management Practices
C.12.e ►Conduct Pilot Projects to Evaluate On-Site Stormwater Treatment via Retrofit
C.12.f ►Diversion of Dry Weather and First Flush Flows to POTWs
C.12.g ►Monitor Stormwater PCB Pollutant Loads and Loads Reduced
C.12.h ►Fate and Transport Study of PCBs In Urban Runoff
C.12.i ►Development of a Risk Reduction Program Implemented Throughout the Region

State below if information is reported in a separate regional report. Municipalities that participate directly in regional activities to can provide descriptions below.

Summary: See BASMAA MRP Regional Supplement for POCs and Monitoring Annual Reporting for FY 2009/2010.

Section 13 - Provision C.13 Copper Controls

C.13.a.i and iii ► Legal Authority: Architectural Copper

(For FY 10-11 Annual Report only) Do you have adequate legal authority to prohibit discharge of wastewater to storm drains generated from the installation, cleaning, treating, and washing of the surface of copper architectural features, including copper roofs to storm drains?	X	**Yes**		**No**
If **No**, explain and provide schedule for obtaining authority within 1 year:				

C.13.b.i and iii ► Legal Authority: Pools, Spas, and Fountains

(For FY10-11 Annual Report only) Do you have adequate legal authority to prohibit discharges to storm drains from pools, spas, and fountains that contain copper-based chemicals?	X	**Yes**		**No**

C.13.c ►Vehicle Brake Pads

See BASMAA MRP Regional Supplement for POCs and Monitoring Annual Reporting for FY 2009/2010.

C.13.d.iii ►Industrial Sources Copper Reduction Results

List below or attach annotated lists or tables from your Industrial and Commercial Site Controls portion of this report, that highlight copper reduction results among the facilities identified as potential users or sources of copper, facilities inspected, and BMPs addressed. For FY09-10 describe below or highlight in the C.4 Evaluation portion (if provided) of this report the steps taken to revise your program to meet new data tracking and reporting requirements for implementation levels described in C.13.d.ii.

The inspection list for Emeryville includes facilities that are potential sources of copper in stormwater runoff. These facilities include vehicle services, autobody shops, print shops, gas stations, fleet operations, manufacturers and industrial businesses. The majority of the facilities are inspected every three years, unless compliance issues are identified which will then put them on an annual inspection cycle until compliance is achieved.

Facilities with the most potential sources of copper, such as the fleet operations (AC Transit Emeryville), manufacturers and industrial businesses (Coulter Steel & Forge, Metalco) are on the priority list to be inspected annually. The contract inspectors have been trained to identify sources of copper and that proper BMPs are in place to minimize discharge of copper to the storm drain system. The power point presentation on the Pollutants of Concern was developed by BASMAA and was viewed by the contract inspectors during the month of June 2010. 10 out of 11 contract inspectors (91%) reviewed this presentation on mercury, copper and PCBs.

C.13.e ►Studies to Reduce Copper Pollutant Impact Uncertainties

Revised. Description reads “State below if information is reported in a separate regional report. Municipalities that participate directly in regional activities to can provide descriptions below.”

Summary: See BASMAA MRP Regional Supplement for POCs and Monitoring Annual Reporting for FY 2009/2010.

Section 14 - Provision C.14 PBDE, Legacy Pesticides and Selenium Controls

C.14.a ►Control Programs for PBDEs, Legacy Pesticides and Selenium Controls
Revised. Description reads "State below if information is reported in a separate regional report. Municipalities that participate directly in regional activities to can provide descriptions below."
Summary: See BASMAA MRP Regional Supplement for POCs and Monitoring Annual Reporting for FY 2009/2010.

Section 15 - Provision C.15 Exempted and Conditionally Exempted Discharges

C.15.b.iii.(1), C.15.b.iii.(2) ► Planned and Unplanned Discharges of Potable Water

Is your agency a water purveyor?		**Yes**	X	**No**

If **No**, skip to C.15.b.vi.(2):

If **Yes**, Complete the attached reporting tables or attach your own table with the same information. Describe program highlights below. For FY 09-10 only, describe steps taken to revise your program to meet new monitoring, data tracking and reporting requirements.

Summary:

C.15.b.vi.(2) ► Irrigation Water, Landscape Irrigation, and Lawn or Garden Watering

Provide implementation summaries of the required BMPs to promote measures that minimize runoff and pollutant loading from excess irrigation. Generally the categories are:

- Promote conservation programs
- Promote outreach for less toxic pest control and landscape management
- Promote use of drought tolerant and native vegetation
- Promote outreach messages to encourage appropriate watering/irrigation practices
- Implement Illicit Discharge Enforcement Response Plan for ongoing, large volume landscape irrigation runoff.

Summary:

The City promotes all of the elements described above through several methods:

1. New development landscaping requirements: Landscapes that are on public property or are used for stormwater treatment have to be built and maintained according to Bay Friendly Landscaping principles, All new landscapes also have to use compost and mulch per city standards as a soil amendment.
2. The City promotes Bay Friendly landscaping and gardening at the City Hall permit counter and at City events like Earth Day.
3. The City is also working on a Bay Friendly version of the state's Water Efficient Landscape Ordinance or WELO.

Emeryville Inventory List (Active Only) 07/30/2010

No.	Name	Address	Last Inspection	Inspector	Category
1	4TH STREET WOODWORKING COMPANY	1266 45TH ST	29-Mar-10	DMAPP	Manufacturing
2	AC TRANSIT EMERYVILLE	1177 47TH ST	5-Jun-09	MWALTON	Fleet Operations
3	ACCESS PRINT	1306 65th Street	25-Feb-10	TQUANE	Commercial
4	ACRYLIC ART INC	1290 45TH ST	29-Mar-10	DMAPP	Commercial
5	ADMAC PRE-PRESS COMPANY	1464 67TH ST	24-Sep-07	TQUANE	Commercial
6	AMC BAY STREET 16 THEATER	5614 BAY ST	1-Feb-07	CWITTORP	Commercial
7	ARIZMENDI BAKERY & PIZZERIA	4801 SAN PABLO AVE	8-Apr-08	DMAPP	Food Service
8	ASQEW GRILL	5614 BAY ST	1-Feb-07	CWITTORP	Food Service
9	AT PRINTING	5515 DOYLE ST	12-Jun-09	MWALTON	Commercial
10	AUTUMN PRESS	1280 65TH ST	24-Sep-07	TQUANE	Commercial
11	Amtrak Train Station	5885 Horton Street	17-Sep-09	KLAI	Fleet Operations
12	BACCHUS PRESS, INC	1287 66TH ST	26-Feb-08	NKLUMPP	Commercial
13	BANK CLUB CAFÉ	3900 SAN PABLO AVE	15-Mar-07	TQUANE	Food Service
14	BARNES AND NOBLE CAFÉ	5616 BAY ST	1-Feb-07	CWITTORP	Retail
15	BASKIN ROBBINS	1199 40TH ST	1-Feb-07	CWITTORP	Food Service
16	BAY STREET EMERYVILLE	5616 BAY ST	1-Feb-07	CWITTORP	Commercial
17	BAYER - BLDG D	4510 HORTON ST BLDG D	1-Apr-10	CLSPENCE	Laboratory
18	BAYER - BLDG Z	5650 HOLLIS ST Building Z	1-Apr-10	CLSPENCE	Food Service
19	BAYER HEALTH CARE PHARMACEUTICALS, PDU	5301 Horton St.	1-Apr-10	CLSPENCE	Laboratory
20	BAYER VN/VS	4225 HORTON STREET	1-Apr-10	CLSPENCE	Laboratory
21	BEL AIRE DISPLAYS	5710 HOLLIS ST	18-Dec-07	MWALTON	Commercial
22	BIENVENIDOS	1320 65TH ST	6-Mar-08	TQUANE	Food Service
23	BISCOS CAFÉ	4240 HOLLIS ST	30-May-07	CLSPENCE	Food Service
24	BOYDS BODY SHOP	1245 POWELL ST	11-May-06	CLSPENCE	Vehicle Service
25	BRIAZZ CAFÉ	1900 POWELL ST	30-May-07	CLSPENCE	Food Service
26	BUCCIS	6121 HOLLIS ST	30-Apr-10	KLAI	Food Service
27	BURGER KING	5701 CHRISTIE AVE	17-Sep-07	NKLUMPP	Food Service
28	Bayer Health Care Pharmaceutical, CMF	1403 STANFORD AVE Building CMF	1-Apr-10	CLSPENCE	Laboratory
29	CABUCCIS	5858 HORTON ST	29-Apr-08	CLSPENCE	Food Service
30	CAFÉ AQUARIUS	1298 65TH ST	4-Apr-08	CLSPENCE	Food Service
31	CALIFORNIA CONTRACT COMPANY	1468 66TH ST	22-Apr-10	DMAPP	Property Management
32	CAPITOLA RESTAURANT	5750 CHRISTIE AVE	12-Mar-08	TQUANE	Food Service
33	CHEVRON	1400 POWELL ST	26-Apr-10	KLAI	Gas Station

Emeryville Inventory List (Active Only) 07/30/2010

No.	Name	Address	Last Inspection	Inspector	Category
34	CHEVYS	1890 POWELL ST	27-Apr-10	DMAPP	Food Service
35	CITY OF EMERYVILLE SENIOR CENTER	4321 SALEM ST	16-Sep-08	TTOLES	Food Service
36	CLEVERFELLOWS WOOD WORKING	1501 POWELL ST	20-Sep-06	MWALTON	Commercial
37	COCINA POBLANA	1320 65TH ST	18-Sep-08	TTOLES	Food Service
38	COFFEE AND SNACK SHOP	5980 HORTON ST	29-Apr-08	CLSPENCE	Food Service
39	COME BACK CAFÉ	6009 CHRISTIE AVE	27-May-08	SARCHACK	Food Service
40	COOP KITCHEN	6613 HOLLIS ST	23-Jul-08	DMAPP	Food Service
41	COULTER STEEL AND FORGE	1494 67TH ST	25-Jun-09	MWALTON	Commercial
42	COURTYARD BY MARRIOT	5555 SHELLMOUND ST	23-Jun-10	DMAPP	Food Service
43	CUSTOM WOODCRAFT & PLASTICS	4514 HOLLIS ST	29-Mar-10	DMAPP	Commercial
44	Carrie Dove Catering	1552 Beach Street #C	NA		Food Service
45	DAILY HARVEST	6613 HOLLIS ST	19-May-08	CLSPENCE	Food Service
46	DENNYS	1776 POWELL ST	23-Jun-10	KLAI	Food Service
47	DIVERSIFIED PROPERTIES	5890 CHRISTIE AVE	27-Feb-08	NKLUMPP	Property Management
48	EMERY BAY 76	1700 POWELL ST	16-Sep-08	TTOLES	Gas Station
49	EMERY BAY CAFÉ	5857 CHRISTIE AVE	1-Jun-09	MWALTON	Food Service
50	EMERY BAY DELI	1400 POWELL ST	3-Jun-09	MWALTON	Food Service
51	EMERY BAY/EMERYVILLE PUBLIC MARKET	5959 SHELLMOUND ST	14-May-08	SARCHACK	Food Service
52	EMERYVILLE MARKET OFFICE TOWERS	6001 SHELLMOUND ST	26-Feb-10	TQUANE	Property Management
53	EMERYVILLE SHELL	1800 POWELL ST	24-Jun-08	DMAPP	Gas Station
54	EMERYVILLE SPORTFISHING	3310 POWELL ST	3-Sep-09	SARCHACK	Commercial
55	ENGINE WORLD	1489 67TH ST	17-Dec-07	MWALTON	Vehicle Service
56	EUROPEAN AUTO SALVAGE	4060 HARLAN ST	24-Jun-08	DMAPP	Vehicle Service
57	Emeryville Market Place Tower	6001 SHELLMOUND ST	7-Jun-07	SARCHACK	Property Management
58	FEDERAL EXPRESS CORP	1600 63RD ST	9-Jun-09	CLSPENCE	Fleet Operations
59	FOUR POINTS HOTELS BY SHERATON	1603 POWELL ST	27-Apr-10	SARCHACK	Property Management
60	GASKET SPECIALISTS	6200 HOLLIS ST	29-Mar-10	DMAPP	Commercial
61	HILTON GARDEN INN	1800 POWELL ST	27-Feb-08	NKLUMPP	Property Management
62	HOME DEPOT	3838 HOLLIS ST	5-Jan-10	KLAI	Retail
63	HONG KONG EAST OCEAN	3199 POWELL ST	7-Jun-10	KLAI	Food Service
64	IHOP	4101 SAN PABLO AVE	15-Sep-09	KLAI	Food Service
65	IKEA	4400 SHELLMOUND ST	24-Mar-06	ACOMEAUX	Retail

Emeryville Inventory List (Active Only) 07/30/2010

No.	Name	Address	Last Inspection	Inspector	Category
66	JAMBA JUICE	5761 CHRISTIE AVE	12-Mar-08	TQUANE	Food Service
67	JULIE HOLOCOMB PRINTERS	1601 63RD ST	27-Apr-10	DMAPP	Commercial
68	KFC	4501 SAN PABLO AVE	14-Sep-09	KLAI	Food Service
69	KHANA KHAZNA	4336 SAN PABLO AVE	29-Sep-08	TTOLES	Food Service
70	Kathleens Doyle St. Cafe	5515 Doyle Street	NA		Food Service
71	LONGS DRUGS #553	4349 SAN PABLO AVE	18-May-06	SARCHACK	Retail
72	Lanesplitter	3645 San Pablo Ave	NA		Food Service
73	Los Cantaros Taqueria #2	4115 San Pablo Ave	NA		Food Service
74	METALCO	1475 67TH ST	22-Feb-10	DMAPP	Manufacturing
75	Mediterraneo	1552 Beach Street #D	NA		Food Service
76	Meera Rani	4336 San Pablo Ave	NA		Food Service
77	NAMIES KITCHEN	6613 HOLLIS ST	4-Jun-08	MWALTON	Food Service
78	NOVARTIS	1400 53rd ST Building MGT	14-Jun-06	DMAPP	Laboratory
79	NOVARTIS (CHIRON CIRCLE CAFÉ)	4560 HORTON ST	15-Jun-09	DMAPP	Food Service
80	NOVARTIS - BLDG 12A	BUILDING 12A - PARKING GARAGE	1-Apr-10	CLSPENCE	Property Management
81	NOVARTIS - BLDG F	1403 STANFORD AVE Building F	1-Apr-10	CLSPENCE	Laboratory
82	NOVARTIS - BLDG H	5301 HORTON St. Building H	3-Apr-08	DMAPP	Laboratory
83	NOVARTIS - BLDG N	4560 HORTON St. Building N	9-Jun-09	CLSPENCE	Laboratory
84	OAKS CORNER/OAKS CLUB	4099 SAN PABLO AVE	15-Sep-09	KLAI	Food Service
85	OFOTO	1399 64TH ST	14-Dec-07	MWALTON	Commercial
86	P F CHANG	5633 BAY ST	16-Sep-09	KLAI	Food Service
87	PAK-N-SAVE STORE #3125	3889 SAN PABLO AVE	14-Sep-09	KLAI	Grocery Store
88	PAULA LE DUC CATERING	1350 PARK AVE	9-Jun-08	MWALTON	Food Service
89	PAULDING & CO.	1410 62ND ST	25-Jul-06	SARCHACK	Food Service
90	PEETS COFFEE	1400 PARK AVE	5-Feb-98	unknown	Food Service
91	PERFECTION LTD. BODY SHOP	1355 PARK AVE	15-Feb-07	NKLUMPP	Vehicle Service
92	PG&E - EMERYVILLE REPAIR SHOP	4525 HOLLIS ST	3-Jun-09	DMAPP	Utility
93	PICTOPIA INC	1300 66TH ST	14-Dec-07	MWALTON	Commercial
94	PIXAR	1200 PARK AVE	29-Jun-06	SARCHACK	Commercial
95	PLUM SCREEN PRINTING	1308 63RD ST	12-May-06	SARCHACK	Commercial
96	Ponte Roma	5885 Horton Street	NA		Food Service
97	QUIZNOS	6520 HOLLIS ST	30-Jan-08	NKLUMPP	Food Service
98	R & L Warehouse (Rypins Lipinski Assoc)	1490 66TH ST	22-May-06	SARCHACK	Commercial
99	ROLLER PRESS, INC	6647 HOLLIS ST	24-Sep-07	TQUANE	Commercial

Emeryville Inventory List (Active Only) 07/30/2010

No.	Name	Address	Last Inspection	Inspector	Category
100	RUBYs CAFÉ	6233 HOLLIS ST	30-May-07	CLSPENCE	Food Service
101	Robas Pizza Cafe	2320 Powell Street	NA		Food Service
102	Rotten City Pozza	6613 Hollis Street	22-Apr-10	DMAPP	Food Service
103	Rudys Can't Fail Cafe	4081 Hollis Street	NA		Food Service
104	SCENDS RESTAURANT	3627 SAN PABLO AVE	14-Sep-09	KLAI	Food Service
105	SEMI FREDDIS	4242 HOLLIS ST	30-Sep-08	TTOLES	Food Service
106	STAR MACHINING	5835 DOYLE ST	29-Oct-09	KLAI	Vehicle Service
107	STARBUCKS #8912	1405 65TH ST	10-Mar-08	TQUANE	Food Service
108	STARBUCKS COFFEE #5601	5767 CHRISTIE AVE	13-Mar-08	TQUANE	Food Service
109	SUBWAY #25529	5858 HORTON ST	10-Mar-08	TQUANE	Food Service
110	SUBWAY #36635	6475 HOLLIS ST	10-Mar-08	TQUANE	Food Service
111	Summer Summer Thai	5885 Hollis Street	24-Feb-10	SARCHACK	Food Service
112	TACO BELL	3839 EMERY ST	29-Sep-08	TTOLES	Food Service
113	TNTs	1552 BEACH ST #A	26-Sep-06	TQUANE	Commercial
114	TOGOS EATERY	5751 CHRISTIE AVE	9-Jun-08	DMAPP	Food Service
115	TOWNHOUSE BAR AND GRILL	5862 DOYLE ST	18-Sep-08	TTOLES	Food Service
116	TRADER JOES	5700 CHRISTIE AVE	18-Sep-08	TTOLES	Grocery Store
117	TRADER VICS	9 ANCHOR DR	16-Sep-09	KLAI	Food Service
118	The Chalet	1411 Powell	NA		Food Service
119	UNITED ARTISTS	6330 CHRISTIE AVE	8-Dec-07	MWALTON	Commercial
120	WATERGATE MARKET	2390 POWELL ST	3-Sep-09	SARCHACK	Mini-Market
121	WOODFIN SUITE HOTEL	5800 SHELLMOUND ST	4-Jun-09	DMAPP	Property Management
122	Walleys Cafe	3900 San Pablo Ave	NA		Food Service
123	Wilson Associates	1501 POWELL ST	6-Dec-06	CLSPENCE	Property Management
124	ZAOS	5614 BAY STREET	4-Jun-09	DMAPP	Food Service

Closed No Inspection

Emeryville Inspection Priority List 07/30/2010

No.	Name	Address	Last Inspection	Inspector	Category	Comment
1	The Chalet	1411 Powell	NA		Food Service	New on SW list July 2010, pulled from FOG list -MKO
2	Carrie Dove Catering	1552 Beach Street #C	NA		Food Service	New on SW list July 2010 -retrieved from FOG list
3	Mediterraneo	1552 Beach Street #D	NA		Food Service	New on SW list July 2010 from FOG list - MKO
4	Robas Pizza Cafe	2320 Powell Street	NA		Food Service	New on SW list, pulled from FOG database July 2010 -MKO
5	Lanesplitter	3645 San Pablo Ave	NA		Food Service	New on SW list July 2010 from FOG list - MKO
6	Walleys Cafe	3900 San Pablo Ave	NA		Food Service	New on SW list July 2010, pulled from FOG list -MKO
7	Rudys Can't Fail Cafe	4081 Hollis Street	NA		Food Service	New on SW list July 2010, pulled from FOG list -MKO
8	Los Cantaros Taqueria #2	4115 San Pablo Ave	NA		Food Service	New on SW list July 2010 from FOG list - MKO
9	Meera Rani	4336 San Pablo Ave	NA		Food Service	New on SW list July 2010 -pulled from FOG list -MKO
10	Kathleens Doyle St. Cafe	5515 Doyle Street	NA		Food Service	New on list July 2010 from FOG list -MKO
11	Ponte Roma	5885 Horton Street	NA		Food Service	New on SW List July 2010, pulled from FOG list -MKO
12	PEETS COFFEE	1400 Park Ave	5-Feb-98	unknown	Food Service	
13	IKEA	4400 Shellmound St	24-Mar-06	ACOMEAUX	Retail	
14	BOYDS BODY SHOP	1245 Powell St	11-May-06	CLSPENCE	Vehicle Service	
15	LONGS DRUGS #553	4349 San Pablo Ave	18-May-06	SARCHACK	Retail	
16	R & L Warehouse (Rypins Lipinski Assoc)	1490 66th St	22-May-06	SARCHACK	Commercial	
17	NOVARTIS	1400 53rd St Building Mgt	14-Jun-06	DMAPP	Laboratory	Previously Chiron which was bought out by Novartis.
18	PAULDING & CO.	1410 62nd St	25-Jul-06	SARCHACK	Food Service	Catering business, per phone call by MKO on March 3, 2010. No sit-down tables for customers, food prep only.
19	CLEVERFELLOWS WOOD WORKING	1501 Powell St	20-Sep-06	MWALTON	Commercial	

Emeryville Inspection Priority List 07/30/2010

No.	Name	Address	Last Inspection	Inspector	Category	Comment
20	TNTs	1552 Beach St #A	26-Sep-06	TQUANE	Commercial	Custom screen printing for T-shirt, confirmed with phone call by MKO on 3/3/2010
21	Wilson Associates	1501 Powell St	6-Dec-06	CLSPENCE	Property Management	
22	BAY STREET EMERYVILLE	5616 Bay St	1-Feb-07	CWITTORP	Commercial	
23	BASKIN ROBBINS	1199 40th St	1-Feb-07	CWITTORP	Food Service	
24	AMC BAY STREET 16 THEATER	5614 Bay St	1-Feb-07	CWITTORP	Commercial	
25	ASQEW GRILL	5614 Bay St	1-Feb-07	CWITTORP	Food Service	
26	PERFECTION LTD. BODY SHOP	1355 Park Ave	15-Feb-07	NKLUMPP	Vehicle Service	
27	BANK CLUB CAFÉ	3900 San Pablo Ave	15-Mar-07	TQUANE	Food Service	
28	BISCOS CAFÉ	4240 Hollis St	30-May-07	CLSPENCE	Food Service	
29	BRIAZZ CAFÉ	1900 Powell St	30-May-07	CLSPENCE	Food Service	
30	RUBYs CAFÉ	6233 Hollis St	30-May-07	CLSPENCE	Food Service	
31	BURGER KING	5701 Christie Ave	17-Sep-07	NKLUMPP	Food Service	
32	AUTUMN PRESS	1280 65th St	24-Sep-07	TQUANE	Commercial	
33	ADMAC PRE-PRESS COMPANY	1464 67th St	24-Sep-07	TQUANE	Commercial	
34	ROLLER PRESS, INC	6647 Hollis St	24-Sep-07	TQUANE	Commercial	
35	NOVARTIS - BLDG H	5301 Horton St. Building H	3-Apr-08	DMAPP	Laboratory	
36	AC TRANSIT EMERYVILLE	1177 47th St	5-Jun-09	MWALTON	Fleet Operations	Bus company
37	FEDERAL EXPRESS CORP	1600 63rd St	9-Jun-09	CLSPENCE	Fleet Operations	Annual inspection, per COEs Peter
38	COULTER STEEL AND FORGE	1494 67th St	25-Jun-09	MWALTON	Commercial	
39	WATERGATE MARKET	2390 Powell St	3-Sep-09	SARCHACK	Mini-Market	
40	PAK-N-SAVE STORE #3125	3889 San Pablo Ave	14-Sep-09	KLAI	Grocery Store	Grocery store
41	IHOP	4101 San Pablo Ave	15-Sep-09	KLAI	Food Service	1 insp/yr, per City of Emeryville
42	TRADER VICS	9 Anchor Dr	16-Sep-09	KLAI	Food Service	Restaurant

CITY OF EMERYVILLE

2009

LANDSCAPE MAINTENANCE SPECIFICATIONS

City of Emeryville
1333 Park Avenue
Emeryville, CA 94608
Tel.: (510) 596-4341

Mandatory Job Walk: THURSDAY JUNE 4, 2 pm starting at the Civic Center, 1333 Park Ave, Emeryville.

Bids Open: Monday, June 8, 2009, 10:00 a.m.

EXHIBIT A

City of Emeryville
2009, Landscape Maintenance Specification

Notice to Contractors
Proposal
Landscape Maintenance Scope of Work

EXHIBIT A

NOTICE TO CONTRACTORS

NOTICE IS HEREBY GIVEN that the City Council, of the City of Emeryville, Alameda County, California, will receive sealed proposals at the Office of the City Engineer of said City, 1333 Park Avenue, Emeryville, CA 94608, until 10:00 AM on Monday June 8, 2009 for furnishing all necessary labor, tools, materials, transportation and equipment for Landscape Maintenance of selected medians, parks, and City facilities as better described herein within Emeryville with varying frequencies as described herein and adhering to Bay Friendly Landscape Maintenance Practices.

THERE WILL BE A MANDATORY JOB WALK, THURSDAY JUNE 4, 10 am STARTING AT THE CIVIC CENTER, 1333 PARK AVE, EMERYVILLE.

At which time they will be publicly opened and read aloud in the Garden Level Conference Room at the Emeryville Civic Center located at 1333 Park Avenue. Any bid received after the closing time will be returned unopened. The Contract shall be based upon the lowest responsible and responsive bidder.

Each proposal shall be submitted in accordance with the plans, specifications and contract documents using the proposal forms included in the project specifications book, and shall be clearly marked on the outside as a specific project bid and shall be accompanied by a certified or cashier's check or performance bond for ten percent (10%) of the amount of the bid submitted, made payable to the City of Emeryville.

This contract is subject to the State contract nondiscrimination and compliance requirements pursuant to Government Code, Section 12990.

The City of Emeryville hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

All Work shall conform to Sections 1770 to 1780 of the California Labor Code.

Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county or counties, in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. Future effective general prevailing wage rates which have been predetermined and are on file with the California Department of Industrial Relations are referenced but no printed in the general prevailing wage rates.

The City of Emeryville reserves the right to reject any or all bids, and further reserves the right to waive formal irregularities as to any bid substantially in conformity with the specifications herein referred to.

Bidders shall possess a valid Class C-27 Landscape license or Class A Contractor license in the State of California AND shall be a Bay Friendly Qualified Landscape Professional certified by StopWaste.Org of Alameda County.

Maurice Kaufman
Public Works Director/ City Engineer
City of Emeryville

PROPOSAL

To the Honorable City Council of the City of Emeryville, Alameda County, California.

CITY OF EMERYVILLE
Landscape Maintenance

Name of Bidder _____

Business Address _____

Telephone No. _____

Fax No. _____

All work for which this Proposal is submitted is for construction in accordance with the following:

1. **The Agreement**
2. **Project Plans and Specifications entitled "Bay Friendly Landscape Maintenance Specifications"**
3. **Bid Form**

Bids shall be submitted for the entire work. The amount of the bid for comparison purposes will be the total of all items of work listed in the Base Bid. The Contract will be awarded to the lowest responsible bidder of the Base Bid as determined by the City.

The bidder shall set forth for each unit basis item of work a Monthly Price all in clearly legible figures in the respective spaces provided for that purpose. The Base Bid shall be the sum of the Monthly Price. The Contract Total shall be the product of the Base Bid multiplied by twelve. In case of discrepancy between Base Bid and the sum of the Monthly Price, the sum of the Monthly Price shall prevail.

If this proposal shall be accepted and the undersigned shall fail to enter into the contract and furnish the performance bond in the sum to be determined as aforesaid with surety satisfactory to the Department of Public Works within eight (8) days, not including Sundays and legal holidays, after the bidder has received notice from the City Engineer that the contract has been awarded, the City may, at its option, determine that the bidder has abandoned the contract, and thereupon this proposal and the acceptance thereof shall be null and void and the forfeiture of such security accompanying this proposal shall operate and the same shall be the property of the City of Emeryville.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firms, or corporation and in submitting this proposal, the undersigned bidder agrees that he has carefully examined the location of the proposed work, the annexed proposed form of contract, and the plans and specifications therein referred to; and he proposes, and agrees if this proposal is accepted, that he will contract with the City of Emeryville in the form of a copy of the contract annexed hereto to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements of the Engineer as therein set forth, and that he will take in full payment therefore the following item prices to wit:

City of Emeryville Landscape Maintenance Bid Proposal Form

	Bid Item	Minimum Frequency	Monthly Base Bid
A	Amtrak Station	1 x week	$
B	Christie Avenue Park	1 x week	$
C	40th Street Medians, Planting Strip on Northern Sidewalk	1 x week	$
D	San Pablo Ave Medians	1 x week	$
E	Powell St Medians, East of Hollis	1 x week	$
F	Doyle Street Greenway, 59th to Ocean	1 x week	$
G	Greenway Park, Ocean - 65th	1 x week	$
H	Greenway Park, 65th -66th	1 x week	$
I	Greenway Park, 66th- 67th	1 x week	$
J	Greenway Park, Elevation 22	1 x week	$
K	Child Care Center	1 x week	$
L	Civic Center	2 x month	$
M	Fire Station 1	1 x week	$
N	Fire Station 2	1 x week	$
O	Police Station	1 x week	$
P	Recreation Center	1 x week	$
Q	Senior Center	1 x week	$
R	Annual Soil Testing		$
	Total Base Bid (Sum A through R)		$
	Total Annual Bid (Sum A-Q x 12 months + R)		$

Total prices bid include full compensation for furnishing all labor, tools, equipment, incidentals, off-haul, disposal, permits, taxes, and license fess, as required to perform the work as described on the Plan and as outline in the Contract. Accompanying this proposal is [ ](Notice: insert the words "CASH($_____)", CASHIER'S CHECK, CERTIFIED CHECK, OR PERFORMANCE BOND") in an amount equal to ten percent of the total of the bid.

The names of all persons interested in the foregoing proposal as principals are as follows:

IMPORTANT NOTICE If bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager thereof; if a co partnership, state true name of firm, also names of all individual copartners composing firm; if bidder or other interested person is an individual, state first and last names in full.

_____

_____

ADDENDA This Proposal is submitted with respect to the changes to the contract included in addenda numbers_____ (Fill in any addenda numbers if addenda have been received.)

By my signature on this proposal, I certify, under penalty of perjury, under the laws of the State of California, that the foregoing questionnaire and statements of Public Contract Code Section 10162, 10232 and 10285.1 are true and correct and that the bidder has complied with the requirements of Section 8103 of the Fair Employment and Housing Commission Regulations (Chapter 5, Title 2 of the California Administrative Code). By my signature on this proposal, I further certify, under penalty of perjury, under the laws of the State of California and the United States of America, that the Noncollusion Affidavit required by Title 23 United States Code, Section 112 and Public Contract Code Section 7106; and the Title 49 Code of Federal Regulations. Part 29 Debarment and Suspension Certification are true and correct.

SIGN HERE >>> By: _____

Its:_____

Date:_____

Bay-Friendly Landscaping Maintenance Specifications

Section 1: General Information

1.1. Project goals

Bay-Friendly Landscape Maintenance practices shall be employed to minimize waste, protect air and water quality, conserve energy and water, and protect natural ecosystems (refer to Bay-Friendly Landscape Guidelines, www.BayFriendly.org).

1.2. General scope of work

This work shall include all supervision, labor, materials, equipment, tools, supplies and services to maintain in a superior condition all landscape areas, irrigation and drainage systems and other related work. All work shall be performed in a workmanlike manner, using quality equipment, Bay-Friendly methods and materials.

1.3. Site description

A. Work to be done is located at various locations in within the City of Emeryville and identified on the enclosed maps and plans. This area is owned or supervised by The City of Emeryville, hereafter referred to as "City".

Bid Item		Ground Cover	Annuals	Turf	Shrubs	Trees	Irrigation	Hardscape
A	Amtrak Station	x			x	x	x	x
B	Christie Avenue Park	x		x	x	x	x	x
C	40th Street Medians, Planting Strip on Northern Sidewalk	x			x	x	x	x
D	San Pablo Ave Medians	x			x	x	x	x
E	Powell St Medians, East of Hollis	x			x	x	x	x
F	Doyle Street Greenway, 59th to Ocean	x		x	x	x	x	x
G	Greenway Park, Ocean - 65th	x		x	x	x	x	x
H	Greenway Park, 65th -66th	x		x	x	x	x	x
I	Greenway Park, 66th- 67th	x		x	x	x	x	x
J	Greenway Park, Elevation 22	x		x	x	x	x	x
K	Child Care Center	x		x	x	x	x	x
L	Civic Center	x	x	x	x	x	x	x
M	Fire Station 1				x	x	x	x
N	Fire Station 2	x	x	x	x	x	x	x
O	Police Station	x		x	x	x	x	x
P	Recreation Center	x	x		x	x	x	x
Q	Senior Center				x		x	x

1.4. Limits of work: Specified work does not include:

A. The limits of work for each site shall be as shown on the attached plans and as described in the mandatory site visits.

1.5. Supplemental Documents

A. Site maps

1. A site map will be provided and shared between the City and the Contractor. The map shall identify general plant palette, landscape features, building and parking footprints, streets and addresses.
2. An irrigation plan identifying locations of meters, valves, controllers, and types of irrigation equipment specified for the site will be provided.
3. A planting plan or list of all existing plants will be provided for use by the Contractor in developing pest management programs and irrigation schedules.

B. Initial soil analysis

Results of soil analyses from samples collected at the project area shall be provided to Contractor, if available.

C. Water budget calculations (MAWA)

Calculations of Maximum Allowable Water Allowances for the project area will be provided to the Contractor, if available.

1.6. Supplemental Resources

A. StopWaste.Org www.BayFriendly.org
   1. Bay-Friendly Landscape Guidelines
   2. A Landscaper's Guide to Grasscycling
   3. A Landscaper's Guide to Mulch

B. *A Guide to Estimating Irrigation of Water Needs of Landscape Plantings*, California Dept of Water Resources, http://cdec.water.ca.gov

C. *Irrigation water audits*, Irrigation Association, www.irrigation.org, and the Irrigation Technology Research Center, www.itrc.org.

D. *California Irrigation Management Information System*, www.cimis.water.ca.gov, Waste management and recycling, www.ciwmb.ca.gov.

E. *The Weed Worker's Handbook, A Guide to Techniques for Removing Bay Area Invasive Plants*, The Watershed Council (510) 231-5655 and the California , Invasive Plant Council (510) 843-3902

F. *Pests of Landscape Trees and Shrubs: An Integrated Pest Management Guide*, 2nd ed., UC Publication 3359, http://www.ipm.ucdavis.edu

G. *A Field Guide to Compost Use*, The Composting Council, 114 South Pitt Street, Alexandria, Virginia 22314, (703) 739-2401, http://www.compostingcouncil.org/index.cfm

Section 2: General Requirements

2.1. Contractor requirements

A. Qualifications

1. Contractor must have a valid California C-27 or Class A contractor's license authorized by the State of California.
2. Contractor shall assign to the project at least one employee possessing a California State Chemical Applicator's License for the control of weeds, plant diseases and other pests.
3. Contractor shall assign to the project at least one employee who has successfully completed the Pollution Prevention Training & Certification Program For Surface Cleaners issued by the Bay Area Storm Water Management Agencies Association **(**BASMAA).
4. The Contractor shall assign to the project at least one employee who is a Certified Irrigation Contractor (Irrigation Association).
5. The Contractor shall assign to the project at least one employee who is a Certified Arborist or Certified Tree Worker (International Society of Arboriculture).
6. The Contractor shall assign to the project at least one employee who has experience or training in Integrated Pest Management (IPM) techniques.
7. Contractor shall assign to the project at least one employee who has experience or training in Bay-Friendly Landscaping practices.

B. Insurance

Contractor shall maintain insurance required in the bid documents throughout the contract period.

2.2. Compliance with laws, ordinances and policies

All services rendered shall be provided in accordance with all ordinances, resolutions, statutes, rules, laws and regulations of the City, and any Federal, State, or local governmental agency having jurisdiction in effect at the time service is provided.

2.3. Work requirements

A. Work schedule

1. Contractor is to provide City with a monthly work schedule describing the work to be preformed in the Project Area.
2. The Contractor shall conduct all operations during the hours of 7:00 a.m. to 5:00 p.m. Monday through Friday, unless otherwise approved by the City. Contractor may not work on any Federal, State, or local holidays.
3. Any non-emergency work that may be deemed hazardous or disruptive (i.e., chemical spraying, tree pruning, etc.) shall be scheduled at least two (2) weeks in advance with the City's representative. For emergency work, Contractor must obtain written approval from City's representative prior to commencing work.
4. City reserves the right to change schedules for special events, conflicts with adjacent property owners/tenants within five (5) working days advance notice.

B. Protection of existing property

1. Contractor must protect all existing plant materials, site improvements, structures, facilities, utilities, and natural areas from damage, both above and below ground. Any damages shall be reported immediately to the City's representative. Any damages caused by Contractor shall be corrected and/or paid for by the Contractor at no cost to the City.
2. Contractor shall protect property from accidental chemical, fuel, oil or other contaminate spills.
3. Contractor shall not wash or blow soil, chemicals, litter, mulch, grass clippings, soil amendments or other materials into storm drains.

C. Safety

Contractor must at all times exercise necessary precautions to provide for the protection of the public and employees.

1. Traffic Lane Closure

Landscape maintenance services conducted in the roadway center medians must be performed in a safe manner. The contractor is required to perform traffic diverting lane closures prior to beginning any trimming operations in the center median. Litter pickup does not require a lane closure.

All lane closure activities must comply with [put in your preferred reference here such as the Federal Highway Manual on Uniform Traffic Control Devices (MUTCD) http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/supplement.htm], and follow notification requirements of the Police and Fire Departments.

2. Chemical Applications

Note: Bay-Friendly Landscaping emphasizes Integrated Pest Management (IPM) practices to control pests and diseases in the landscape. IPM uses cultural, mechanical, physical, and biological control methods before using pesticides. Chemical controls are applied only when monitoring indicates that preventative and non-chemical methods are not keeping pests below acceptable levels. When pesticides are required, the least toxic and the least persistent pesticide that will provide adequate pest control is applied.

Contractor shall apply all chemicals in a safe manner and according to label instructions and City, State and Federal requirements. A California Chemical Applicators license is required by the contractor for chemical applications. The Contractor shall mix and apply chemicals to protect against accidental spills and drift to non-target areas, and to insure safety of the applicator. Any spilled chemicals, as well as contaminated soil, water, and/or landscape materials must be removed from the Project and disposed of in accordance with the City requirements. The Contractor shall maintain applicator's licenses and records of applications as required by the State.

A Chemical Work Report shall be completed for each chemical application. The Contractor is responsible for submitting chemical usage reports to the County Agricultural Department. Copies are to be sent to the City's representative as part of the Contractor's monthly report.

D. Contractor's Personnel and Supervision

1. Contractor shall provide a list including all Contractor's and subcontractor's employees assigned to work site and include work schedule and assignment. Contractor must update list within 3 business days of any change. All Contractor's employees assigned to the Project must demonstrate they are United States citizens or have a legal right to work in the United States.
2. The Contractor shall assign a qualified trained supervisor to oversee work performed at the work site and to act as the Contractor's liaison with the City representative. This supervisor must inspect the Project daily (Monday through Friday) except holidays and provide direction to the Contractor's workers and/or subcontractors. This supervisor shall speak, write, read and understand English and be capable of writing schedules, monthly reports noting any deficiency that needs correcting and major projects for the coming month. This supervisor shall have at least three (3) years of landscape maintenance supervision experience.
3. All Contractor's personnel shall adhere to basic public works standards for working attire including; uniform shirts with Contractor's name or logo clearly visible at all times when working at all locations, proper shoes and other equipment required by State Safety Regulations. Shirts are to be maintained in a neat and presentable condition.
4. All Contractor vehicles are to have a readable sign with Contractor's name or logo and telephone number. Trucks are to be kept in a clean and presentable condition.

E. Subcontracting

A portion of the work covered by these specifications may be subcontracted with prior approval of the City. Contractor shall supervise subcontractor and guarantee work quality. Subcontractors and their qualifications must be submitted to the City thirty (30) days before working at the site. All subcontractors assigned to the Project must demonstrate they are United States citizens or have a legal right to work in the United States. It is preferred that subcontractors have training in Bay-Friendly Landscaping or other experience in sustainable landscape practices.

F. Supplies and Equipment

1. Fuel conservation and low emission equipment

The Contractor will implement strategies in work operations to reduce fossil fuel consumption and emissions, such as:

a. Use hand-powered equipment when possible.
b. Minimize use of gas-powered blowers, especially on planting beds.
c. Select smallest, most fuel efficient equipment to accomplish task.
d. Consider vehicles that operate on natural gas or biodiesel.
e. Maintain equipment properly and keep it well tuned.
f. Emphasize employee carpooling to Project.

2. Use local products and suppliers

The Contractor shall use local products and suppliers (produced within 150 miles from the project site) to the extent possible to minimize fuel consumption and emissions.

3. Use recycled and salvaged materials

The Contractor shall use salvaged and recycled-content products where possible Materials for reuse may be found by contacting the CalMax website at www.ciwmb.ca.gov or at www.stopwaste.org .

4. Equipment refueling and repair

The Contractor shall refuel and repair equipment in a safe manner to protect against accidental spills. Limit refueling to specific areas on a site. Measures shall be taken to prevent, control, and clean-up spills. Clean-ups should be immediate, automatic and routine and performed by a trained staff member or a licensed cleaning company. Contact the local emergency response team agencies to report all spills.

G. Reporting and inspecting

1. The Contractor shall submit a written report each month stating all contract work completed. The report shall show the work completed during each week contract work was accomplished, and shall be submitted with and cover the same work as the Contractor's billing statement for the previous month's work. The report shall include documentation of stormwater and irrigation inspections, IPM monitoring, soil and pest management treatments and other chemical applications.
2. Unusual horticultural problems such as pests, disease and damages that are beyond the scope of the Contractor’s responsibility shall be brought to the attention of the City representative immediately.
3. The City, through a designated representative, shall make periodic inspections to insure that complete and continuous maintenance is fulfilled. In addition, the City may obtain the services of an approved horticultural specialist to inspect plantings and make recommendations for improvements in the maintenance program.

H. Work Performance

1. Contractor is responsible for (a) having thoroughly investigated and considered the scope of services to be performed, (b) carefully considering how the services should be performed, and (c) fully understanding the facilities, difficulties, and restrictions attending to the performance of the services required. Contractor is responsible to investigate the area and be fully acquainted with the conditions.
2. Should the Contractor discover any latent or unforeseeable conditions, which will materially affect the performance of services, Contractor shall immediately inform the City of such fact and shall not proceed except at Contractor’s risk until written instructions are received from the City.
3. Plants, irrigation systems, etc., damaged by traffic accidents or vandalism, shall be reported immediately to the City. Repair of damaged shall be considered as extra work.

I. Extra Work

1. New and unforeseen work will be classed as extra work when determined by the City that such work is not covered by these specifications. Upon notification that extra work will be required, the Contractor shall submit an itemized, written cost proposal for such work to the City. The City shall retain the right to reject such cost proposal and perform the extra work with City forces or other contractors. Should the proposal be acceptable to the City, the Contractor shall be advised in

writing, and upon receipt of such written notification, shall begin the work within five (5) working days or as agreed to between the Contractor and the City.

2. The Contractor shall do such extra work in accordance with the agreement for extra work and with the provisions of these specifications and shall furnish all labor, materials and equipment. Payment for extra work performed shall be as agreed to by the Contractor and the City and as bid. Compensation for material will not exceed Contractor cost plus 10%. Contractor must provide invoice copies to be compensated for material.

J. Emergency Work

1. Contractor shall supply office, pager and home phone numbers of employee responsible for emergencies. Said employee shall be fluent in English.
2. City will provide Contractor with emergency numbers for City's representatives and emergency personnel. Said employee shall be fluent in English.

Section 3: Landscape Standards and Maintenance Requirements

3.1 Overview

A. Landscape maintenance areas shall be at the locations and areas shown on the map and/or listed on the bid cover sheet, and shall be maintained as herein specified.

B. Landscape maintenance shall include watering; replacement planting; fertilizing; applying pesticides; tree staking and tying; weeding; mulching; removing litter and debris; trimming; pruning of trees under 15' in height; mowing; edging; maintaining the existing irrigation systems; maintaining header boards; emptying trash receptacles at every visit.

C. Bay-Friendly Landscape Principles and Objectives

Contractor shall maintain the specified landscape in an integrated approach, consistent with the principles set forth in the Bay-Friendly Landscape Guidelines, www.BayFriendly.org. The seven Bay-Friendly principles are:

1. Landscape locally – The Project landscape is part of a larger natural ecosystem of the San Francisco Bay Area. The materials and methods used to maintain the Project can support the health, diversity and sustainability of the Bay.
2. Landscape for less to the landfill – Reducing waste starts with not generating plant debris in the first place by fertilizing, irrigating and pruning judiciously, grasscycling, mulching and composting plant debris. Using recycled content, salvaged, durable or local materials conserves resources and reduces the amount of energy consumed by the landscape.
3. Nurture the soil – Create a healthy soil that supports a healthy landscape by protecting the soil from compaction and erosion, replenishing organic matter and mulching, using slow-release and organic fertilizers and minimizing use of chemicals that harm beneficial soil organisms.
4. Conserve water – Use California's water supply efficiently by reducing irrigation requirements, irrigating according to plant need, maximizing irrigation system performance, increasing the water holding capacity of the soil and using recycled water.
5. Conserve energy – Conventional landscapes are fossil fuel consumptive. Nationally it is estimated that lawn mowers consume 400 million gallons of gas. Look for opportunities to conserve fuel and energy by choosing and maintaining materials and equipment for fuel conservation.
6. Protect water and air quality –Reduce runoff, reduce contaminants in runoff through an integrated pest management (IPM) program, and increase the soil's ability to remove pollutants from runoff through steps such as mulching bare soil. Reduce air pollution by reducing fossil fuel consumption, recycling plant debris on –site and planting trees to remove CO2 and absorb air pollutants.,
7. Protect and maintain wildlife habitat – The Project may provide food, water, shelter and nesting sites for birds, butterflies, beneficial insects and animals that contribute to the ecological diversity of the Bay. Methods to protect them include minimizing application of chemicals by implementing an integrated pest management (IPM) program, and conserving flowers, berries, fruits, seed heads, low branch cover, and natural vegetation in open space areas.

D. Applicable standards and Best Management Practices (BMP's).

Contractor shall adhere to applicable professional standards as defined by a professional organization including:

1. American National Standard for Tree Care Operations - ANSI A300, Parts 1 and 2
2. International Society of Arboriculture BMP for Tree and Shrub Fertilization, and BMP for Tree Pruning.
3. Irrigation Association BMPs
4. Bay-Friendly Landscape Guidelines

3.2 Site Analysis

A. Contractor shall characterize the Project's microclimate(s) and range in exposures as a precursor for developing the water management program.

B. Contractor shall identify plants species present in the Project landscape

1. Contractor will determine key plant species present

2. Contractor will determine plant water use classification for each plant species present as a precursor for developing the water management program. Plant water use classifications may be found in “A Guide to Estimating Irrigation Water Needs of Landscape Plantings in California” (Univ. of Calif. Cooperative Extension, 2000).
3. Contractor will identify any plants in the Project landscape that are protected from removal or damage by ordinance, and adhere to all protection requirements.

C. Soil tests

1. Contractor shall collect and submit soil samples for each area covered under the contract to an accredited and approved testing laboratory, annually for 3 years during the transition to a Bay-Friendly landscape and then when planning a renovation and when experiencing ongoing problems. At a minimum one soil sample shall be collected from turf and one from shrub/ground cover areas that are representative of site conditions. Sample collection procedures shall adhere to recommendations of the soil testing laboratory. Contractor shall request that the laboratory make recommendations based on an ‘organic’ approach to soil and landscape management. Submit soil lab report and any proposed soil amendments and cost adjustments to City Representative for written approval. After review and written approval by the Owner, amend the soils according to said laboratory's recommendations. The approved soils laboratory recommendations shall be considered a part of this specification. Analyses to be performed include:

   pH, electrical conductivity, nitrate, ammonium, phosphorus, potassium, calcium, saturation percent, sodium, chloride, sodium adsorption ratio, boron, % sand-silt-clay, lime, % organic
2. Contractor shall determine infiltration rate and drainage characteristics within the Project. This information shall be considered when scheduling irrigation.

D. Topography and potential for runoff

Contractor shall assess topography within the Project and evaluate potential for runoff. This information shall be considered when scheduling irrigation and determining need for erosion control measures.

3.3 Soil & Nutrition Management

A. Goals

A healthy, biologically diverse soil is required to sustain a healthy landscape. A basic concept of Bay-Friendly Landscaping is to cultivate a functional, living soil foodweb which shall then provide nutrient elements as needed to sustain healthy and attractive plants while avoiding excessive growth that might attract pests and/ or need to be removed through pruning, edging or mowing. Landscape maintenance activities shall be implemented to nurture biological activity, provide organic material, and protect soil from damage. Bay and riparian water quality and soil and aquatic habitat shall be protected by controlling soil erosion.

B. Contractor shall protect soil from compaction by:

1. Cultivating soil when it is moderately moist; wet and dry soils shall not be cultivated.
2. Scheduling maintenance operations that require driving equipment over the soil (e.g. mowing turf) when the soil is dry.
3. Confining traffic to paved areas.
4. When temporary access is needed over non-paved areas, distribute the load over the soil with 6” thick coarse organic mulch or reusable planks.

C. Contractor shall protect the soil from erosion by:

1. Maintaining vegetative cover over the soil to the extent possible.
2. Placing compost berms, blanket, socks or tubes along slopes to slow water.
3. Maintaining a minimum of 2” mulch [substitute ‘minimum of 3” ‘if required by the City’s water conservation ordinance]cover over bare soil.
4. Minimizing use of blowers in planting beds and on turf.
5. Using coarse mulch on slopes to avoid washing of mulch into storms drains.
6. Create leaf repositories in planting beds as appropriate.

D. Soil and plant tissue analysis
   1. Contractor shall submit soil samples for testing as described in Section 3.2 – Site Analysis. The types and quantities of fertilizer and/or soil amendments to be applied shall be determined from the results of the soil analysis and shall be based on an 'organic' approach to soil management.
   2. Where plant micronutrient deficiencies are suspected, plant tissue analyses are recommended to determine need for fertilizer application.

E. Incorporate organic soil amendments
   1. Contractor shall incorporate composted organic amendments into soil prior to planting annuals or replanting damaged turf or ground cover.
      a. Planting beds for annuals and ground covers: Incorporate 2-4" of compost into the top 6-12" of soil
      b. Turf: Incorporate 1-2" (3 1/3 – 6 2/3 cubic yards) compost into the top 5-7" of soil
   2. As required by the Emeryville Municipal Code, 3 cubic yards of compost per thousand square feet of landscaped area must be used as the soil amendment in all landscaping in place of synthetic fertilizers including tablets and granules. In stormwater treatment landscapes, pesticides are also not allowed. Allowable Compost products:
      a. A. Grover Landscaping – "Wondergrow Premium Compost" Call 866-764-5765 or 209-545-4401
      b. Jepson Prairie – "Four Course Compost" http://www.jepsonprairieorganics.com/buycompost.htm

F. Maintain organic mulch
   1. Contractor shall maintain a minimum of Mulch: 2-3 inches of recycled wood trimming mulch over all bare soil areas except within one foot radius of tree trunks. Allowable Mulch products:
      a. Grover Landscaping - "deco mulch" or "arbor mulch" 209-872-0734 – Jake
      b. Greenwaste Recycle Yard - "Treeincarnation Mulch" or "Mixed and aged" mulches. http://www.greenwasterecycleyard.com/products.htm
   2. Sheet mulching shall be employed where possible.

G. Retain natural leaf litter and clippings
   1. To conserve nutrients on-site and protect the soil surface, Contractor shall retain natural leaf drop under trees or in shrub beds. Select only tree and shrub beds that will not allow leaf litter or mulch to wash out into storm drains. Where leaf litter detracts from landscape appearance due to large leaf size, it is preferable that leaves be chopped and returned to landscape beds. Remove diseased leaves that would provide inoculums for plant infection.
   2. Contractor shall practice grasscycling (discussed further in Section 4.1 *Turf Management*)

H. Fertilizers and other soil amendments
   1. Bay-Friendly Landscaping relies on organic fertilizers and soil amendments from natural sources that release elements slowly, which shall be preferred.
   2. Additional amendments and fertilizers that are approved for use by the Organics Materials Research Institute (OMRI) for use in crop production are approved for use in landscape. See www.omri.org. Contractor must supply fertilizer and soil amendment labels including the guaranteed analysis identifying components of the material and the percent nutrient content. Contractor is required to apply the appropriate amount of fertilizer to supply the specified quantity of nutrient as determined by soil analysis and/or plant tissue analysis.
   3. Contractor shall apply and manage fertilizers and amendments to prevent pollution of surface and ground water and to avoid creating a nitrogen draft in the soil or toxicity to plants.
   4. Application frequency

      Fertilizers shall be applied on a prescription base only. Application frequency shall be determined by plant need and assessed through soil and/or tissue analyses. For biding purposes the following maximum annual number of applications are provided.

      a. Trees, shrubs, woody ground covers: One time per year
      b. Herbaceous ground covers, perennials Two times per year

c. Annuals and turf: Four times per year

5. Restricted materials. Fertilizers that are not approved or are restricted for use in crop production by OMRI shall be applied only after review and written approval by the City Representative.

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3.4 Water Management

A. Water conservation goals

Landscapes shall be irrigated to maintain plant appearance and health, and managed to conserve water and avoid overspray and water damage to City's hardscape and property.

B. Irrigation system assessment

1. Irrigation application rates and distribution uniformity are best assessed through an irrigation audit. Contractor is encouraged to perform an irrigation audit bi-annually (refer to www.itrc.org) or to schedule an audit with the water district that is the service provider to that property.
2. If a water audit is not performed, the Contractor shall inventory of the irrigation system at the start of the job. For each hydrozone determine the irrigation type and nozzle size, spacing and gallonage (from manufacturer's literature).

C. Irrigation scheduling – water budget method

The water budget approach to irrigation scheduling shall be used to match plant need with water application and avoid over-irrigation and overspray.

1. Irrigation intervals and frequency shall be suitable for weather conditions, soil infiltration rates, and plant species' rooting depth and water requirements within each hydrozone. Calculation methods are described in *A Guide to Estimating Irrigation Water Needs of Landscape Plantings in California*, available from the Dept. of Water Resources, Sacramento, CA.
2. Irrigation frequency shall be based on ET (evapotranspiration) data (available through CIMIS). Irrigation shall be applied at approximately 60% allowable depletion (AD) for turf and annuals, 70% for non-drought tolerant and 90% for drought tolerant plantings.
3. Irrigation duration within each hydrozone shall be based on the soil infiltration rate, species water requirement and rooting depth within the hydrozone, and the application rate and distribution uniformity of the irrigation system within that zone. Enough water shall be applied at each irrigation cycle to wet through the depth of root zone. Where runoff occurs, the application time shall be divided into shorter time intervals and repeated as needed.
4. Irrigation frequency for each hydrozone shall be adjusted a minimum of every four weeks to reflect ET expected in the next month.
5. For sites with controllers that monitor ET and adjust schedules automatically, the Contractor shall program the controller according to manufacturer specifications, and monitor to ensure that frequency is appropriate.
6. Whenever possible, landscape irrigation shall be scheduled between 2:00 a.m. and 10:00 a.m. to avoid irrigating during times of high wind or high temperature.

D. Irrigation monitoring

1. Contractor shall monitor soil moisture within plant root zones using a soil probe or shovel and adjust irrigation schedules accordingly if a soil moisture sensor is not signaling the irrigation controller.
2. Contractor shall observe irrigation system in operation to identify and correct water runoff or standing water problems as noted in the Section below 3.4.*F Maintenance and Repair.*
3. Contractor shall determine irrigation run time demand monthly by recording water meter reading before and after irrigation (if site has a separate irrigation meter). This data should be reconciled with run times and flow rates to determine if there is unusual consumption which may indicate stuck valves or leaks.

E. Irrigation with recycled water

For landscapes irrigated with recycled water and containing salt-sensitive plants, the Contractor should increase irrigation frequency and duration to allow for elevated salts in the water and reduce salt accumulation in the root zone.

1. As a general guideline it is recommended that irrigation frequency adjusted to 50% allowable depletion (AD) for turf and annuals, 60% for non-drought tolerant plantings and 80% for drought tolerant plantings.
2. Once a month during the summer, irrigation duration should be increased by 20% to leach salts below plant root zones.

F. Irrigation system maintenance and repair

1. Contractor shall maintain the irrigation system for optimum performance, as per manufacturers specifications, by inspecting the entire system on an ongoing basis. This includes cleaning and adjusting all sprinkler and bubbler heads, drip emitters and valves for proper coverage.
2. Contractor shall inspect the irrigation system in operation to ensure proper function according to the following schedule:

April – October	Weekly
November – March	Monthly (when system operating)

3. All malfunctioning equipment shall be repaired prior to the next scheduled irrigation.
4. All irrigation replacement parts shall be of the same manufacturer, type, and application rates as existing, or approved equals or upgrades.
5. Irrigation system pressure shall be checked and adjusted at least monthly during season of operation.
6. Twice a year, at a minimum, the Contractor shall:
   a. Ensure all flush valve/cap locations are visible.
   b. Ensure valve boxes are visible and can be opened.
   c. Inspect valves, filters, and pressure regulators for damage or leaks. Check wire splices.
   d. Clean valve boxes of dirt and debris.
   e. Flush filters. A hose can be attached to the flush cap to keep water out of the valve box.
   f. Inspect and clean filters. Replace damaged or torn filters.
   g. Flush laterals.
   h. Make sure plants have adequate numbers of drip emitters for their size.
   i. Test backflow preventers.
7. Sprinkler heads shall be modified as needed to avoid overspray.
8. Where possible and appropriate, recommend to City where sprinklers could be converted to drip or bubblers.
9. Contractor shall maintain and submit monthly documentation of irrigation checks and as built plans of any changes or adjustments to the system. See Section 2.3.G.1. *Reporting and Inspecting*.

3.5 Integrated Pest Management (IPM)

A. Goals

An integrated pest management program shall be implemented to:

1. maintain healthy, attractive plants, maximize resistance to pests and out-compete weeds;
2. monitor for presence of pests and to evaluate pest impact to plant health and appearance, and nuisance to the public;
3. provide control treatments that have minimal negative effects on all but the pest and that protect air and water quality.

Contractor shall assume pesticides are potentially hazardous to human and environmental health. Preference shall be given to reasonably available nonpesticide alternatives when considering the use of pesticides on City property.

B. Insects and diseases

1. Key plant:key pests

   Contractor shall identify primary plant species and cultivars in the landscape (key plants) and the pests that commonly cause significant harm to plant health or appearance (key pests).

2. Monitoring

Contractor shall monitor landscape areas to identify presence of beneficial insects and pests, determine populations, life stage, and degree of damage to plants. Key plants:key pests will be monitored closely during normal periods of pest activity. This information will be the basis on which pest control methods are initiated. Records of monitoring activity shall be kept.

3. Controls

Bay-Friendly Landscaping seeks to control pests without harming non-target organisms, or negatively affecting air and water quality and public health. It relies on IPM which uses a range of cultural, mechanical, physical, and biological control methods before using pesticides. Chemical controls are applied only when monitoring indicates that preventative and non-chemical methods are not keeping pests below acceptable levels. When pesticides are required, the least toxic and the least persistent pesticide that will provide adequate pest control is applied. Pesticides are not applied on a prescheduled basis.

a. Cultural/Mechanical/physical methods. A number of maintenance practices or modifications of them can make the environment unfavorable for pest reproduction, movement, or survival. Often simply modifying an existing maintenance practice, such as timing of pruning or fertilization, can produce positive results,. Other mechanical or physical practices may specifically combat plant pests or increase host resistance. Key treatments include:

1) Fostering a healthy soil, judicious fertilization only when needed, and managing irrigation appropriately.
2) Pruning to remove infected or infested branches and shoots. Time pruning to avoid periods of insect infestation. For example prune pines and eucalyptus in the winter (December-February) when bark beetles and borers are inactive.
3) Removing fallen twigs, leaves, and fruit that contains disease inoculum.
4) Mulching soil surface to reduce weeds and to reduce splashing and the drops of mud that would protect spores deposited on plant surfaces.
5) Trapping insects using sticky surfaces (also used for monitoring). Mechanical traps can be used to control rodents.
6) Bringing to attention of City plants that are disease or insect prone and suggesting resistant plant replacements or those better suited to the site and microclimate

b. Biological methods

Biological controls are pesticides of natural origin that have limited or no adverse effects on the environment or beneficial organisms. Determining the effective biological control and proper timing of application are critical to success in pest control.

The Contractor shall consider the following biological control methods when cultural/mechanical/physical methods are not adequate to lower pest populations to the target level.

1) *Bacillus thuringiensis* (Bt)
2) Parasitic nematodes
3) Pheromone traps
4) Beneficial insect release and conservation

c. Pesticides

The term pesticide applies to insecticides, fungicides and other substances used to control pests. Antimicrobial agents are not included in this definition of pesticides.

1) Least toxic pesticides

When cultural, mechanical, physical and biological controls have provided inadequate pest control, the Contractor may select and apply an appropriate least-toxic pesticide as a last resort. Least-toxic pesticides have a high LD-50, low residual, and narrow range of toxicity. Application must be timed to the appropriate life stage of the pest.

Examples are:

a. insecticidal soaps,
b. horticultural oils,
c. herbicidal soaps,

d. neem,
e. Pyriproxyfen insect growth regulator (e.g. Distance IGR)

2) Restricted chemicals

Organophosphate-containing pesticides have been found to persist in the environment and cause water quality impairment of some creeks, streams, and arroyos in Alameda County. They are restricted from use. Examples include:

a. diazinon, trade names Spectracide®, Knox-out® and
b. chlorpyrifos, trade names Dursban®, Pageant®)
c. malathion and carbaryl (trade name Sevin®)

Water quality agencies recommend against using pyrethroids and pyrethrins containing piperonyl butoxide (PBO). These chemicals are restricted from use.

Pyrethrins are toxic to birds, fish, and beneficial insects, should be used only as a last resort, and carefully applied to avoid runoff and contact with non-target plants.

Contractor shall not apply any Toxicity Category I or II Pesticide Product, any pesticide containing a chemical identified by the State of California as a chemical known to the State to cause cancer or reproductive toxicity pursuant to the California Safe Drinking Water and Toxic Enforcement Act of 1986, and any pesticide classified as a human carcinogen, probable human carcinogen or possible human carcinogen by the United States Environmental Protection City, Office of Prevention, Pesticides and Toxic Substances.

3) All chemical applications shall be performed by a licensed, trained technician. Contractor must be a licensed Pest Control Operator as required by the State of California, registered in Alameda Co., and strictly adhere to all laws.

4. Notice of pesticide use
   a. Signs shall be posted at least three days before application of the pesticide product and remain posted at least four days after application of the pesticide.
      1) Signs shall be posted (i) at every entry point where the pesticide is applied if the pesticide is applied in an enclosed area, and (ii) in highly visible locations around the perimeter of the area where the pesticide is applied if the pesticide is applied in an open area.
      2) Signs shall be of a standardized design that are easily recognizable to the public and workers.
      3) Signs shall contain the name and active ingredient of the pesticide product, the target pest, the date of pesticide use, the signal word indicating the toxicity category of the pesticide product, the date for re-entry to the area treated, and the name and contact number for the City department responsible for the application.
   b. Contractor shall not be required to post signs in right-of-way locations that the general public does not use for recreational purposes. However, Contractor shall notify City in writing three days prior to pesticide applications in the right-of-way areas.
   c. Contractor may obtain authorization from the City to apply a pesticide without providing a three-day advance notification in the event of a public health emergency or to comply with worker safety requirements. Signs shall be posted for at least four days after application of the pesticide, as described in the Section above, 3.5.B.4.a., *Notice of Pesticide Use*
5. Recordkeeping and reporting
   a. Contractor shall maintain records of all pest management activities. Each record shall include the following information:
      1) target pest;
      2) type and quantity of pesticide used;
      3) site of the pesticide application;
      4) date the pesticide was used;

5) name of the pesticide applicator;
6) application equipment used;
7) prevention and other non-chemical methods of control used.

b. Contractor shall submit the pest management record to City on a monthly basis.

C. Weed management

1. Landscapes shall be maintained in a healthy and attractive manner using Bay-Friendly methods.
2. Identify key weeds

   Contractor will identify key weeds present and design weed manage program to target those species.
3. Invasive plants

   Invasive plant species may have been included in the plantings inadvertently. Seedlings and/or suckers from those plants shall be removed by the Contractor. Refer to www.bayfriendly.org or www.cal-ipc.org for a list of invasive species. Remove all invasive plants not planted intentionally as noted in the Section below, 3.5.C.4, *Controls*. When invasive plants are an intended part of the landscape please notify City and propose a replacement option.
4. Controls
   a. Cultural/Mechanical/physical methods will be used as the first choice in weed management.
      1) Monitor planting areas frequently to identify and eradicate weeds early in the growth stage prior to their setting seed.
      2) Cut or pull weeds using hand operated equipment where possible.
      3) Mow large areas to reduce weed growth, and eliminate species that are not tolerant of mowing. Mowing is especially effective when done prior to seed set. Mowing also reduces fire hazard in open spaces.
      4) Goats may be used to manage weed growth, where appropriate. Goats must be well managed and plants fenced to avoid damage to non-target plants.
      5) Mulches shall be maintained at all times over soil surface that is not covered by vegetation. (see also Section 3.3 E, *Incorporate Organic Soil Amedments*)
      6) Sheet mulching, a layered system of non-plastic weed barrier overlain by mulch, shall be employed where possible.
      7) Propane-fueled flamers may be used in winter and spring with required permits and approval by the Fire Marshall to kill early-season, non-grass weeds by heating the cells until they burst. The weed quickly wilts and dies.
   b. Least toxic herbicides may be employed by Contractor as a last resort. Examples are:
      1) Fatty acid potassium salts (herbicidal soaps e.g. Safer's Superfast Weed and Grass Killer® Dr. Bronner's Peppermint Anti-Bacterial Soap)[1]
      2) Acetic and citric acids (e.g. Nature's Glory Weed and Grass Killer RTU®)
      3) Clove, citrus, mint and thyme oil (e.g. Matran II®, Xpress®)
      4) Corn gluten
      5) Low-toxic, low-residual herbicide [e.g. glyphosate (Round-up®), glufosinate-ammonium (Finale®), pelargoic acid (Scythe®)
   c. Restricted herbicides that may not be used because they have been identified as ground water contaminants are (trade names in parentheses):
      1) Atrazine (Aatrex)
      2) Simazine (Princep)
      3) Bromacil (Hyvar, Krovar)
      4) Prometon (Pramitol)
      5) Bentazon (Basagran)
      6) Norflurazon (Solicam, Predict, Zorial)

[1] Trade names are used only as examples and are not intended as an endorsement.

d. Restricted herbicides that may not be used because they have been identified as a compost contaminant are:

1) Picloram
2) Clopyralid

D. Vertebrate pests

1. Identify key pests that significantly affect plant health and appearance. Accurate identification is critical to appropriate control. Common vertebrate pests are:
   a. Rodents including rats, mice, voles, moles, gophers
   b. Deer
   c. Rabbits
2. Controls
   a. Mechanical/physical/cultural methods shall be implemented as a first course of action. Preferred treatments include:
      1) Exclusion – Protect plants from damage by grazing animals with fences or cages.
      2) Habitat modification – Reduce cover at the periphery of the project as needed to solve problem.
      3) Application of repellents that are suitable for use in public areas.
      4) Traps may be used where mechanical/physical/cultural methods have been insufficient to control moles, voles, gophers, rats and mice.
      5) Encouragement of predators – owl boxes
   b. Least toxic rodentcides

3.6 Plant Growth Control

A. Goals

The goals of plant growth control are to maintain healthy, attractive plants within the planting space allotted with minimal removal and disposal of vegetative growth.

B. Pruning

1. Selective pruning

Plants shall be pruned selectively to remove individual stems or branches that extend beyond the natural conformation of the plant to a lateral branch or at the point of attachment.

Woody groundcovers shall be selectively pruned to control growth towards pavements rather than edged.

2. Hedging and shearing
   a. Existing hedges that have been maintained by shearing in the past and that do not have adequate space to grow to mature plant size can continue to be maintained by shearing. Suggest to City alternative plantings to these existing hedges that can be maintained in their natural shape for future renovations
   b. For hedges that have not yet been maintained by shearing: shearing of plants into formal shapes shall be avoided as this destroys the natural form of the plant and generates excessive waste.
      1) Plants having adequate space for development shall instead be selectively pruned on an as needed basis.
      2) Where plant size must be controlled because of inadequate space for the plant, prune to reduce size by cutting individual branches or stems to interior lateral branches at appropriate locations. Contractor will notify City where hedges could be replaced with size-appropriate plants to eliminate requirement for shearing.

3. Tree Pruning

Tree pruning shall be preformed only by trained, experienced personnel. An I.S.A. Certified Arborist or Tree Worker is to be present at all times during pruning. See Section 3.5.C.,*Pruning,* for additional requirements.

C. Fire management/defensible space

For projects that adjoin open space areas, manage growth of grasses shrubs and trees to minimize fire risk. Contractor shall maintain vegetation clearances as required by the Alameda County Fire Marshall. Where recommended clearances would negatively affect plant health or environmental quality, Contractor will contact the Fire Marshall for a field inspection and recommendation. See also Section 4.5.B. *Fire Management.*

D. Irrigation and fertilization programs shall be designed to avoid excessive plant growth that would require additional pruning or mowing to manage.

3.7 Waste Management

A. Goals

Bay Friendly landscapes are maintained to minimize producing waste and to use as much of the plant debris generated on-site as is possible and to recycle plant debris and discarded materials to the maximum extent feasible at appropriate recycling centers to avoid adding it to landfill.

B. Retain natural leaf litter

To conserve nutrients on-site and protect the soil surface, Contractor shall retain natural leaf drop and other organic materials in shrub beds. Select sites where leaves will not enter the storm drain. Where leaf litter detracts from landscape appearance due to large leaf size, it is preferable that leaves be chopped and returned to landscape beds. Remove diseased leaves that would provide inoculum for plant infection.

C. Grasscycle

Contractor will leave grass clippings on the lawns after mowing, from at least April through October,. Sports turf may be excluded 'in season' when clippings will interfere with play.

D. Debris removal and clean-up

Contractor shall keep all landscaped areas, walkways, building entries and exits free from trash and debris. Debris clean up with brooms and rakes is preferred to blowers.

E. Producing mulch from site generated untreated and unpainted wood and plant debris

Contractor is encouraged to chip all vegetative materials and wood and use on site as mulch.

G. Recycle waste

Contractor shall separate all plant debris that cannot be reused on site and other discarded materials that are readily recyclable and transport to appropriate recycling facilities.

If lawn clippings, shrub and tree trimmings, or prunings must be removed from site, they must be kept free of other types of debris and transported to a local composting facility or transfer station that offers a separate processing (and often discounts) of plant debris for composting.

3.8. Landscape repair/refurbishment

When landscapes are repaired and/or refurbished, the Contractor will employ Bay-Friendly landscape guidelines to enhance the sustainability of the landscape, reduce waste and protect watersheds. Refer to the Bay-Friendly landscape guidelines at www.BayFriendly.org .

A. Plants that are failing or have died are to be estimated and included in the monthly costs of each area.

Replace high input plants with species better suited to location and use. Species should be selected that are:

1. appropriate size at maturity for planting site
2. native to region and/or drought tolerant
3. resistant to significant pests
4. non-invasive
5. increase diversity of the plant palette.

B. Reduce amount of area occupied by high water use plantings where possible (e.g. replace turf with drought-tolerant ground cover). Suggest alternative plantings to City for decorative turf especially turf areas less than 8 feet wide.

C. Reuse materials removed from the landscape that are in good condition.

D. When buying new materials, select recycled content materials where possible.

E. When irrigation systems are replaced or upgraded, install high efficiency systems.

Section 4: Landscape Specifications for Plant Types and Landscape Zones

4.1 Turf

A. Standards for Health and Appearance

Turf shall be maintained to sustain an attractive appearance, and good health with deep roots uniform green color, and uniform density with no bare spots,

B. Protect Environmental Resources

Turf shall be maintained using materials and methods that protect environmental quality and human health, conserve water and energy, minimize waste, and reuse and recycle materials to the extent possible.

C. Mowing and Edging

1. Turf shall be mowed and edged at regular intervals to maintain a neat appearance and healthy growth.
2. Grasscycling shall be employed for all turf areas (see A Bay-Friendly Landscaping Guide to Grasscycling, available at www.BayFriendly.org.). Grasscycling requires an integrated management system of irrigation, mowing height, and mowing frequency. Key components are:
   a. Mow often, at least once a week during the growing season.
   b. Mow when the turf is dry; at least on the day following irrigation.
   c. Maintain equipment to keep blades sharp and balanced; usually sharpen once a week. Keep area under the mower deck clean. Mulching mowers are more effective, but not required for grasscycling.
   d. Leave clippings on the turf. A second pass over clumps or windrows may be necessary if clippings are long. **Clipping may not be left on turf in clumps or windrows.**
   e. Seasonal rains may require temporarily halting of grasscycling because of excessive moisture. The clippings must be picked up and used as a mulch or transported to a plant debris recycling facility. Do not use grass clippings as a mulch if an herbicide has been applied to the turf.
2. Turf will be mowed at a height appropriate for the species of turf:
   a. Tall fescue 2-3”
   b. Bluegrass, ryegrass, red fescue 1.5-2.5”
   c. Dichondra, bermudagrass 0.5-1.0”
3. Turf will be cut with appropriately sized equipment which will give a neat appearance without rutting, sliding over or scalping the turf.
4. Mowing patterns will be changed weekly or however often necessary to avoid rutting.
5. Turf areas adjacent to pavements shall be edged on a vertical plane every other mowing.
6. A stringtrimmer or shears shall be used to trim around valve boxes, headerboards, etc. in the turf, on a regular basis to maintain a neat appearance.
7. Turf shall be maintained away from the base of features in the turf at the following distances:
   a. Trees 24”
   b. Signs and similar features 4”
   c. Buildings and other structures 4”
8. Clippings will be removed from paved surfaces the day of the mowing and edging.
9. Contractor shall take care to avoid damaging plants, equipment, signs, buildings, vehicles, etc. during turf maintenance operations. Any trees which have more than 50% of the circumference of the trunk tissue removed or damaged by string trimmers or mowers shall be considered destroyed and shall be replaced at the Contractor’s expense with like species and size.

D. Leaf Litter

1. Mulch leaf litter with mowers as needed throughout the fall and winter months. Large concentrations of leaves may require pickup. Rakes are preferred for leaf litter removal over blowers.
2. Leaf litter will not be allowed to accumulate to the point that it will damage or kill turf.

3. Leaf litter that is removed from turf will be either chopped and used on-site, or transported to a plant debris recycling facility.

E. Aerating and De-thatching

1. Aerate turf in traffic areas once a year. Aerate turf in low use areas every two years. Use equipment with hollow tines that removes a soil core. Topdress with ¼ inch fine compost. Overseed to fill in thin spots and to crowd out weeds.
2. Dethatch turf when thatch accumulates to a one-half inch thickness by cutting with a vertical mower. Thatch shall be raked and either composted for use elsewhere, or transported to a greenwaste recycling facility.
3. Aeration and dethatching activities should be scheduled to coincide with active growth period of the turf species, avoid hot weather conditions, and avoid peak time of crabgrass and other weed seed germination.

F. Water Management

1. Turf shall be irrigated to provide adequate water to maintain an attractive, green, healthy turf, and moderate growth rate during its growing season, without stimulating excessive growth rates.
2. The water budget approach to irrigation scheduling shall be used to match turf need with water application and avoid over-irrigation (see Section 3.4, *Water Management*)
3. Irrigation frequency under normal conditions should not exceed three times per week.

G. Soil and Nutrition Management

1. Contractor shall incorporate composted organic amendments into soil prior to planting annuals or replanting damaged turf or ground cover as per Sections 3.3.D, *Soil and Plant Tissue Analysis* and 3.3.E., *Incorporate Organic Soil Amendments.*
2. Fertilization shall be managed to provide moderate, not excessive, turf growth, and to avoid polluting surface and ground waters. Grasscycling reduces the fertilization requirement of turfgrass by 15-20%.
3. Fertilizer applications are to be made on a prescription basis only when soil and/or plant tissue analyses identify specific deficiencies. For bidding purposes plan to apply approximately 3.5-4.5 lbs. of actual nitrogen to cool season grasses per year in four applications. Include the available nitrogen from grasscycling and applying compost as a topdressing in the calculations of actual nitrogen.
4. Contractor shall select fertilizers that are released over a period of time, are predominantly organic and derived from natural sources, are produced locally, and will not pollute surface and ground water when properly used to provide primary nutrient needs of turf (see also Section 3.3 *Soil and Nutrition Management*).

H. Pest Management (see also Section 3.4, *Integrated Pest Management*)

1. Contractor is responsible for monitoring turf to identify and assess pest problems, and for taking action to control pests that affect turf health and appearance when pest populations or damage exceed established thresholds.
2. Contractor shall employ integrated pest management procedures (see also Section 3.5, *Integrated Pest Management*).
3. Contractor shall select pest controls to provide adequate pest control without harming non-target organisms, or negatively affect air and water quality and public health. Pest management shall rely first on cultural, mechanical, physical, and biological control methods. Chemical controls may be applied only when monitoring indicates that preventative and non-chemical methods are not keeping pests below acceptable levels. When pesticides are required, the least toxic and the least persistent pesticide that will provide adequate pest control will be applied. Pesticides may not be applied on a prescheduled basis.
4. Contractor may not apply restricted chemicals that may harm water resources.

4.2 Ground Cover

A. Standards for Health and Appearance

Ground covers shall be maintained to sustain an attractive, healthy, normal color for the species, and uniform density with no bare spots. Ground covers shall be kept free of trash and debris.

B. Protect Environmental Resources

Ground cover shall be maintained using materials and methods that protect environmental quality and human health, conserve water and energy, minimize waste, and reuse and recycle materials to the extent possible.

C. Edging and Mowing

1. Ground covers shall be trimmed on a regular basis to maintain pavements and other features clear of vegetation.
2. The edge of woody ground covers (e.g. rosemary, cotoneaster) shall be maintained by pruning individual branches or stems to interior lateral branches a minimum of 6" and maximum of 12" from the edge of pavement.
3. The edge of herbaceous ground covers (e.g. hypericum) may be maintained using turf edging equipment.
4. When ground covers become excessively woody or develop thatch in excess of 4", the Contractor shall prune the planting severely to rejuvenate it. For most woody ground covers, prune to approximately 6-8" height. Herbaceous ground covers may be mowed at an appropriate height, generally 4-6". This treatment shall only be applied in the late winter/early spring when ET is low and regrowth will occur quickly.
5. Handling of plant debris

   Contractor is encouraged to chip all vegetative materials use on site as mulch and/or compost and use as soil amendment.

   If ground cover prunings must be removed from site, they must be kept free of other types of inorganic debris and transported to a local composting facility or transfer station that offers a separate processing (and often discounts) of plant debris for composting.

D. Mulching

1. Contractor shall maintain a minimum of 2" of coarse organic mulch at all times over bare soil areas that is not covered by ground cover. Mulch shall be applied so that it is below grade (curb, edging,etc.) by half an inch Some additional grading preparation and grading of areas adjacent to sidewalks or edging, etc. may be required to keep the finish grade of the mulch at an appropriate level. Mulch materials shall be chipped or shredded plant debris wood chips from pruning operations. When available, utilize chipped plant prunings generated on-site.

E. Water Management

1. Ground cover shall be irrigated to provide adequate water to maintain an attractive, green, healthy plants, and moderate growth rate during its growing season.
2. The water budget approach to irrigation scheduling shall be used to match ground cover need with water application and avoid over-irrigation (see Section 3.4, *Water Management*)

F. Soil and Nutrition management (see also Section 3.3, *Soil & Nutrition Management*)

1. Contractor shall incorporate composted organic amendments into soil prior to planting annuals or replanting damaged turf or ground cover as per Sections 3.3.D, *Soil and Plant Tissue Analysis* and 3.3.E., *Incorporate Organic Soil Amendments.*
2. Fertilization shall be managed to provide moderate, not excessive, growth, and avoid polluting surface and ground waters.
3. Fertilizer applications are to be made on a prescription basis only when soil and/or plant tissue analyses identify specific deficiencies. For bidding purposes plan to apply 1-2 lbs. of actual nitrogen to ground cover areas in two applications annually.
4. Contractor shall select fertilizers that are released over a period of time, predominately are organic and derived from natural sources, are produced locally, and will not pollute surface and ground water when properly used to provide primary nutrient needs of the ground cover.

G. Pest management

1. Contractor is responsible for monitoring ground cover to identify, assess pest problems and taking action to control pests that affect ground cover health and appearance when pest populations or damage exceed established thresholds.
2. Contractor shall employ integrated pest management procedures (see also Section 3.5, *Integrated Pest Management*).

3. Contractor shall select pest controls to provide adequate pest control without harming non-target organisms, or negatively affect air and water quality and public health. Pest management shall rely first on cultural, mechanical, physical, and biological control methods. Chemical controls may be applied only when monitoring indicates that preventative and non-chemical methods are not keeping pests below acceptable levels. When pesticides are required, the least toxic and the least persistent pesticide that will provide adequate pest control will be applied. Pesticides may not applied on a prescheduled basis.
4. Contractor shall not apply restricted chemicals that may harm water resources.

4.3 Annual Color

A. Standards for Health and Appearance

Annual color beds shall be maintained to sustain an attractive, healthy, plants and uniform density with no bare spots. Annual beds shall be kept free of weeds, trash and debris. Weeds shall be controlled using methods consistent with Section 3.5, *Integrated Pest Management.*

B. Protect Environmental Resources

Annual color beds shall be maintained using materials and methods that protect environmental quality and human health, conserve water and energy, minimize waste, and reuse and recycle materials to the extent possible.

C. Contractor shall suggest to City where annual color beds could be converted to perennial beds that provide color over several seasons and minimize waste.

D. Annual color shall be planted only in designated beds or pots and hydrozoned. Provide two installations per year: one in the early spring, and one in the late fall. Select species appropriate for the exposure and microsite conditions. Avoid species requiring excessive irrigation and fertilization to sustain.

E. Mulching

1. Contractor shall maintain a minimum of 2” of coarse organic mulch at all times over bare soil areas that is not covered by ground cover. Mulch shall be applied so that it is below grade (curb, edging,etc.) by half an inch Some additional grading preparation and grading of areas adjacent to sidewalks or edging, etc. may be required to keep the finish grade of the mulch at an appropriate level. Mulch materials shall be chipped or shredded plant debris wood chips from pruning operations. When available, utilize chipped plant prunings generated on-site.

F. Contractor shall prune annual plants monthly or more to remove spent flowers before seed is formed.

G. Water Management

1. Annual color shall be irrigated to provide adequate water to maintain an attractive, green, healthy plants and moderate growth rate during the growing season.
2. The water budget approach to irrigation scheduling shall be used to match plant need with water application and avoid over-irrigation (see Section 3.5)
3. Maximum irrigation frequency under normal conditions should not exceed two times per week.

H. Soil and Nutrition Management

1. Contractor shall incorporate composted organic amendments into soil prior to planting annuals or replanting damaged turf or ground cover as per Sections 3.3.D, *Soil and Plant Tissue Analysis* and 3.3.E., *Incorporate Organic Soil Amendments.*
2. Fertilization shall be managed to provide moderate, not excessive, growth, and to avoid polluting surface and ground waters.
3. Fertilizer applications are to be made on a prescription basis only when soil and/or plant tissue analyses identify specific deficiencies.
4. Contractor shall select fertilizers that are released over a period of time, are predominantly organic and derived from natural sources, are produced locally, and will not pollute surface and ground water when properly used to provide primary nutrient needs of annual color (see also Section 3.4).

I. Pest Management (see also Section 3.6)

1. Contractor is responsible for monitoring annual color to identify and assess pest problems, and for taking action to control pests that affect turf health and appearance.
2. Contractor shall employ integrated pest management procedures (see also Section 3.6).

3. Contractor shall select pest controls to provide adequate pest control without harming non-target organisms, or negatively affect air and water quality and public health. Pest management shall rely first on cultural, mechanical, physical, and biological control methods. Chemical controls may be applied only when monitoring indicates that preventative and non-chemical methods are not keeping pests below acceptable levels. When pesticides are required, the least toxic and the least persistent pesticide that will provide adequate pest control will be applied. Pesticides may not be applied on a prescheduled basis.
4. Contractor may not apply restricted chemicals that may harm water resources.

J. Handling of plant debris

Contractor is encouraged to use all vegetative materials as a feedstock for compost.

If plant debris must be removed from site, it must be kept free of other types of debris and transported to a local composting facility or transfer station that offers a separate processing (and often discounts) of plant debris for composting.

4.4 Shrubs

A. Standards for Health and Appearance

Shrubs shall be maintained to sustain an attractive and healthy plant that is characteristic for the species.

B. Protect Environmental Resources

Shrubs shall be maintained using materials and methods that protect environmental quality and human health, conserve water and energy, minimize waste, and reuse and recycle materials to the extent possible.

C. Pruning

1. Selective pruning
   a. Shrubs shall be pruned selectively only as necessary to enhance their natural shape.
   b. Where plant size must be controlled because of inadequate space for the plant, prune to reduce size by cutting individual branches or stems to interior lateral branches at appropriate locations
2. Hedging and shearing
   a. Existing hedges that have been maintained by shearing in the past and that do not have adequate space to grow to mature plant size can continue to be maintained by shearing. Suggest to City alternative plantings to these existing hedges that can be maintained in their natural shape for future renovations
   b. For hedges that have not yet been maintained by shearing: shearing of plants into formal shapes shall be avoided as this destroys the natural form of the plant and generates excessive waste.
      3) Plants having adequate space for development shall instead be selectively pruned on an as needed basis.
      4) Where plant size must be controlled because of inadequate space for the plant, prune to reduce size by cutting individual branches or stems to interior lateral branches at appropriate locations. Contractor will notify City where hedges could be replaced with size-appropriate plants to eliminate requirement for shearing.
3. Trimmings generated by pruning shall either be chipped and used as mulch on the site, or transported to a plant debris recycling facility.

D. Mulching

1. Contractor shall maintain a minimum of 2” of coarse organic mulch at all times over bare soil areas surrounding shrubs. Mulch shall be applied so that it is below grade (curb, edging,etc.) by half an inch Some additional grading preparation and grading of areas adjacent to sidewalks or edging, etc. may be required to keep the finish grade of the mulch at an appropriate level. Mulch materials shall be chipped or shredded composed green waste, wood chips from pruning operations, or chipped landscape prunings generated on-site.
2. Sheet mulching shall be employed at installation, where possible.

E. Water Management

1. Shrubs shall be irrigated to provide adequate water to maintain an attractive, healthy plants, and moderate growth rate during their growing season.
2. The water budget approach to irrigation scheduling shall be used to match shrub need with water application and avoid over-irrigation (see Section 3.4 *Water Management*)

F. Soil and Nutrition Management (see also Section 3.3, *Soil & Nutrition Management*)

1. Fertilization shall be managed to provide moderate, not excessive, growth, to and avoid polluting surface and ground waters.
2. Fertilizer applications are to be made on a prescription basis only when soil and/or plant tissue analyses identify specific deficiencies. Additional fertilization of mature shrubs maintained with mulch may not be necessary.
3. Contractor shall select fertilizers that are released over a period of time, predominantly are organic and derived from natural sources, are produced locally, and will not pollute surface and ground water when properly used to provide primary nutrient needs of the ground cover.

G. Pest Management

1. Contractor is responsible for monitoring shrubs to identify, assess pest problems and taking action to control pests that affect shrub health and appearance when pest populations or damage exceed established thresholds.
2. Contractor shall employ integrated pest management procedures (see also Section 3.5, *Integrated Pest Management*).
3. Contractor shall select pest controls to provide adequate pest control without harming non-target organisms, or negatively affect air and water quality and public health. Pest management shall rely first on cultural, mechanical, physical, and biological control methods. Chemical controls may be applied only when monitoring indicates that preventative and non-chemical methods are not keeping pests below acceptable levels. When pesticides are required, the least toxic and the least persistent pesticide that will provide adequate pest control will be applied. Pesticides may not applied on a prescheduled basis.
4. Contractor shall not apply restricted chemicals that may harm water resources.

4.5 Trees

A. Standards for Health and Appearance

Trees shall be maintained to sustain an attractive, healthy and structurally stable plant that is characteristic for the species.

B. Protect Environmental Resources

Trees shall be maintained using materials and methods that protect environmental quality and human health, conserve water and energy, minimize waste, and reuse and recycle materials to the extent possible.

C. Pruning of trees under 15’ in height

1. All tree pruning shall be performed only by trained, experienced personnel. An I.S.A. Certified Arborist or Tree Worker is to be present at all times during pruning. Arborist must have a State of Calif. Contractors License for Tree Service (C61-D49).
2. All pruning shall be in accordance with the Best Management Practices for Pruning (International Society of Arboriculture, 2002) and adhere to the most recent editions of the American National Standard for Tree Care Operations (Z133.1) and Pruning (A300).
3. Young trees shall receive annual pruning for up to five years after planting by personnel trained in pruning to develop tree structure. The purpose of the pruning is to direct the tree into the appropriate form for the species and the site and to develop a strong branch structure. Trees with codominant trunks and multiple branch attachments shall be pruned to correct those defects over a period of several years.
4. Trees shall be pruned in the following manner:
   a. Clear the crown of diseased, crossing, weak and dead branches. Trees shall not be routinely thinned.
   b. Provide 14’ vertical clearance over roads, 8’ over walkways;
   c. Reduce end weight on heavy, horizontal branches

d. Create a strong central trunk with lateral branches spaced vertically and horizontally.
e. Interior branches shall not be stripped out.
f. No more than 20% of live foliage shall be removed within the trees.
g. Trees shall not be climbed with spurs.
h. Branch removal or reduction cuts (thinning cuts) are to be employed rather than heading cuts. Trees shall not be topped or headed back.
i. No green palm fronds shall be removed above a horizontal line drawn across the base of the crown.

5. Schedule pruning to avoid time of bud break, flowering and leaf drop on live branches, and to avoid peak periods of insect and disease activity for pests to which the tree species is susceptible.
6. Pruning operations shall be conducted in a manner that does not damage surrounding and understory plants and structures.

D. Staking

1. Tree stakes, ties and guys shall be checked regularly to ensure trees are not being damaged. Adjust ties and stake as necessary to prevent girdling and wounding.
2. Tree stakes shall be removed within two years of planting. For trees unable to stand alone after two years, Contractor will shorten the stakes and lower the ties to 3-4' height. If after the third year the tree will not stand without a stake, Contractor will inspect to determine cause of instability, and make recommendations to City for corrective action.
3. If new ties are needed to secure tree to stake, use ties composed of recycled materials. The tie must be broad, have a smooth surface where it contacts the trunk, and provide some elasticity. Wire covered with hose, tubing or other materials, and covered electrical wire are not acceptable materials.

E. Mulching

1. Contractor shall maintain a minimum of 2" of coarse organic mulch at all times over bare soil areas surrounding trees taking care not to place mulch against trunks. Mulch shall be applied so that it is below grade (curb, edging,etc.) by half an inch Some additional grading preparation and grading of areas adjacent to sidewalks or edging, etc. may be required to keep the finish grade of the mulch at an appropriate level. Mulch materials shall be chipped or shredded plant debris and/or wood chips from pruning operations. When available, utilize chipped landscape prunings generated on-site.
2. Sheet mulching shall be employed at installation, where possible.

F. Water Management

1. Trees shall be irrigated to encourage deep root growth and to provide adequate water to maintain an attractive, healthy plants, and a moderate growth rate during their growing season.
2. The water budget approach to irrigation scheduling shall be used to match shrub need with water application and avoid over-irrigation (see Section 3.4, *Water Management*)

G. Soil and Nutrition Management (see also Section 3.3, *Soil & Nutrition Management*)

1. Fertilization shall be managed to provide moderate, not excessive, growth, and to avoid polluting surface and ground waters.
2. Fertilizer applications are to be made on a prescription basis only when soil and/or plant tissue analyses identify specific deficiencies. Additional fertilization of mature trees may not be necessary.
3. Contractor shall select fertilizers that are released over a period of time, are predominantly organic and derived from natural sources, are produced locally, and will not pollute surface and ground water when properly used to provide the primary nutrient needs of the tree.

H. Pest management

1. Contractor is responsible for monitoring trees to identify, assess pest problems and taking action to control pests that affect tree health and appearance when pest populations or damage exceed established thresholds.
2. Contractor shall employ integrated pest management procedures (see also Section 3.5, *Integrated Pest Management*).

3. Contractor shall select pest controls to provide adequate pest control without harming non-target organisms, or negatively affect air and water quality and public health. Pest management shall rely first on cultural, mechanical, physical, and biological control methods. Chemical controls may be applied only when monitoring indicates that preventative and non-chemical methods are not keeping pests below acceptable levels. When pesticides are required, the least toxic and the least persistent pesticide that will provide adequate pest control will be applied. Pesticides may not applied on a prescheduled basis.
4. Contractor may not apply restricted chemicals that may harm water resources.

4.6 Open Space & Meadows

A. Standards for Health and Appearance

Open space area shall be maintained to sustain an attractive, healthy plant community that is capable of supporting wildlife.

B. Fire Management

1. Contractor shall maintain vegetation clearances and manage fuel loads as required by the Alameda County Fire Marshall. Where recommended clearances would negatively affect plant health, Contractor will contact the Fire Marshall for a field inspection and recommendation.
2. Herbaceous growth shall be managed to minimize fire hazard by mowing on a frequency to meet Alameda County Fire Marshall requirements.
3. Goats may be used to manage growth, where appropriate. Plants that need protection must be fenced and goats well-managed to prevent damage to non-target plants.

C. Soil and Nutrition Management

1. Contractor shall protect soil from compaction by:
   a. Scheduling maintenance operations that require driving equipment over the soil (e.g. mowing, pruning) when the soil is dry.
   b. Confining traffic to paved areas.
   c. When temporary access is needed over non-paved areas, distribute the load over the soil with 6” thick coarse organic mulch or wood planks.
2. In planted areas, Contractor shall maintain a minimum of 3” of coarse organic mulch at all times over soil surface that is not covered by vegetation. Mulch materials shall be chipped or shredded plant debris, wood chips from pruning operations. When available, utilize chipped landscape prunings generated on-site.
3. Sheet mulching shall be employed where possible.

D. Protect soil from erosion

Contractor shall protect the soil from erosion by:

1. Maintaining vegetative cover over the soil to the extent possible.
2. Placing compost berms, blanket, socks or tubes along slopes to slow water.
3. Maintaining mulch cover over bare soil.

E. Invasive species

Invasive plant species shall be eradicated from open space areas to the extent possible using methods described in Section 3.5.C.,*Weed Management.* Refer to www.cal-ipc.org for a list of invasive species.

4.7 Bioswales and biorention areas

A. Standards for Health and Appearance and Function

Bioswales and biorention areas remove pollutants from the stormwater by filtering runoff slowly through an active layer of soil. They shall be maintained to ensure that flow is not obstructed, erosion is prevented and they continue to be effective without causing flooding or harboring vectors and in accordance with the site’s Stormwater Control Plan’s Operation and Maintenance Plan, if available.

B. Protect Environmental Resources

Bioswales depend on soils that are biologically active and held together by plant roots. They shall be maintained using materials and methods that support this biological activity, protect environmental

quality and human health, conserve water and energy, minimize waste, and reuse and recycle materials to the extent possible.

C. Monitoring and inspection

1. Inspect inlets for channels and exposure of soils and report to the City if evidence of erosion is found. Examine rock or other material and report to the City if it requires replacement.
2. Inspect inlets and slopes for instability, erosion or obstructions. Report indications of problems to City.
3. Observe soil at the bottom of the swale for uniform infiltration. Confirm that irrigation is adequate but not excessive. Report water that does not drain within 48 hours of a storm.
4. Confirm that check dams and flow spreaders are in place and level. Report problems to City.

D. Sediment control

1. Clear minor obstructions and inspect for accumulation of sediment. Contractor shall remove accumulated sediment in bioswales by hand and around catch basins and culverts as necessary to maintain adequate flow.

E. Vegetation management

Examine vegetation to ensure that it is healthy, adequately but not overwatered, and dense enough to provide filtering. Remove debris. Prune large trees and shrubs as per previous Sections 4.4, *Shrubs* and 4.5 *Trees*. Weeds and invasive plant species shall be controlled as described in 3.5.C. *Weed Management.* Refer to www.cal-ipc.org for list of invasive species

F.Mowing

Grassy swales shall be mowed as needed to maintain adequate water flow. For bidding purposes assume 4 mowings per year. Remove no more than 1/3 of the length of the leaf blade. Clippings should be collected and either used elsewhere on-site or transported to a plant debris reycling facility.

G. Mosquito Abatement

Areas of seasonal water collection that do not drain within 48 hours shall either be filled with gravel/cobble or treated monthly with Bt (See Section 3.5.B.3, *Controls*)

4.8 Planter Boxes for Stormwater Management

A. Standards for Health and Appearance and Function

Planter boxes capture runoff from downspouts, plaza or paved areas. The runoff briefly floods the box and then percolates through an active layer of soil. They shall be maintained to continue to be effective, attractive and healthy.

B. Protect Environmental Resources

Planter boxes depend on soils that are biologically active. They shall be maintained using materials and methods that support this biological activity, protect environmental quality and human health, conserve water and energy, minimize waste, and reuse and recycle materials to the extent possible.

C. Monitoring and inspection

1. Examine downspouts or inlets from paving. Remove debris and separate organic matter for recycling. Check splash blocks or rocks. Report damaged pipes, downspouts, blocks or rocks that need replenishing.
2. Examine overflow pipe to make sure it can safely convey excess flows to a storm drain. Repair disconnected pipe or report damage to City.
3. Check underdrain piping to make sure it is intact and unobstructed. Report evidence of damage or malfunction to the City.
4. Check planter box for holes, cracks, rot or failure. Make minor repairs and report more significant damage to City.

D. Vegetation management

Examine vegetation to ensure that it is healthy, adequately but not overwatered, and dense enough to provide filtering. Remove debris. Prune large trees and shrubs as per previous sections on growth and waste management. Weeds and invasive plant species shall be controlled as described in Section 3.5.C., *Weed Management.* Refer to www.cal-ipc.org for list of invasive species

E. Soil and Nutrition Management

1. Check that the soil is at the appropriate depth to allow a reservoir of water above the soil surface and to function as a stormwater filter. Confirm that water is draining through soil within 3-4 hours after a storm event. Alleviate compaction or replace soil as needed, with soil that includes compost at a rate of 1 part compost to 3 parts soil.
2. Remove accumulations of sediment, litter or plant debris. Separate organic matter and handle as section on waste management. If plant debris must be removed from site, it must be kept free of other types of debris and transported to a local composting facility or transfer station that offers a separate processing (and often discounts) of plant debris for composting.

4.9 Hardscape

A. Debris removal and clean-up

Contractor shall keep all hardscape areas, walkways, building entries and exits free from trash and debris.

B. Surface cleaning

Contractor will clean hard surfaces as needed to remove accumulation of sediment, dirt, or other materials that distracts from the visual impact of the area or creates a safety hazard. Cleaning methods must be consistent with the Bay Area Stormwater Management Agencies Association. (BASMAA) criteria (listed below in Section 4.9.E., *BASMAA Certification*).

C. Root interference

Potential root damage to hardscapes shall be reported to City. Corrective action will be determined and directed as an extra service.

D. Pervious paving

Contractor shall clean the surface of pervious paving to remove fine debris and dirt as needed to maintain permeability (approximately four times per year). Pavement may be cleaned with street sweepers equipped with vacuums, water, and brushes, followed by high-pressure hosing of surface. If necessary, replace displaced aggregate fill with clean gravel. Cleaning methods must be consistent with the Bay Area Stormwater Management Agencies Association. (BASMAA) criteria (listed below in section 4.9.E., *BASMAA Certification*).

E. BASMAA Certification

Pollution Prevention Training & Certification Program For Surface Cleaners issued by the Bay Area StormWater Management Agencies Association **(**BASMAA) is required to perform surface cleaning work. BASMAA certification number: _____. http://www.basmaa.org/recognition/ All work should conform to BASMAA standards. BASMAA standards encourage the use of dry cleaning methods over wet such as the use of absorbing materials for oils and sweeping. It discourages the use of any soaps or solvents. It encourages directing wash water into the landscape or collection of waste water for disposal into a sanitary sewer instead of a storm drain. See their website for a thorough list of criteria.

Section 5: Definitions

Antimicrobial agent – Any substance or mixture of substances intended for inhibiting the growth of or destroying any bacteria, fungi pathogenic to human and other animals, or viruses declared to be pests under Section 12754.5 of the California Food and Agricultural Code, except slime control agents. Antimicrobial agents include, but are not limited to, disinfectants, sanitizers, bacteriostats, sterilizers, fungicides and fungistats.

Biodiesel – A fuel produced through a process in which organically-derived oils such as soybean or vegetable oil are combined with alcohol.

Bioswale - Channel constructed to improve the water quality of runoff, usually while also conveying it, through filtering by vegetation and other mechanisms that capture and hold water pollutants.

Blanket – Mat of organic, biodegradable materials such as coir fibers, straw or curled wood fiber, on or between photodegradable polypropylene or degradable natural fiber netting. The blanket is placed on the soil surface to protect from surface erosion.

Compost Berm – An erosion control device composed of linear mounds of compost placed along a slope to slow water movement and retain sediment.

Evaportranspiration (ET) – The combined loss of water from a given area, and during a specified period of time, by evaporation from the soil surface and by transpiration from plants.

Grasscycling – A turf management technique in which turf is mown frequently and clippings are left on the turf to return nutrients to the soil, thereby reducing fertilizer requirements by as much as 50%.

Hardscape – The hard-surface components of the landscape such as sidewalks, pavements, non-living features.

Hydrozone – A portion of a landscaped area having plants with similar water needs that are served by one irrigation valve or set of valves with the same schedule.

I.S.A. – International Society of Arboriculture, www.isa-arbor.com

Integrated Pest Management – A holistic approach to managing insects, plant disease, weeds and other pests so that their populations do not exceed a tolerable level by fostering an environment favorable for plants and other beneficial organisms and unfavorable for pests. If pest problems arise a variety of control techniques are considered, with least toxic pesticides being applied as a last resort.

Pesticide – As defined in Section 12753 of the California food and Agricultural Code, a pesticide includes any of the following: (a) Any spray adjuvant. (b) Any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever. Antimicrobial agents are excluded from the definition of pesticide.

> "Toxicity Category I Pesticide Product" means any pesticide product that meets United States Environmental Protection Agency criteria for Toxicity Category I under Section 156.10 of Part 156 of Title 40 of the Code of Federal Regulations.
>
> "Toxicity Category II Pesticide Product" means any pesticide product that meets United States Environmental Protection Agency criteria for Toxicity Category II under Section 156.10 of Part 156 of Title 40 of the Code of Federal Regulations.

Sheet Mulching - A layered system of non-plastic weed barrier (e.g. recycled cardboard, newspaper) overlain by mulch that is used for soil improvement and weed control

Sock – Sleeve filled with mulch, straw, or other organic, biodegradable material to create long tube placed along a slope to slow water movement and retain sediment.

Tube – See sock.

Wattle – See sock.

Earth Day Celebration!

Saturday, April 17th
12:00-4:00pm
@ Emeryville's New, Award Winning Doyle-Hollis Park (1333 61st Street)

Environment!

- Environmental Groups and Education Booths to Help You Live a Greener Lifestyle!
- Emeryville Organic Community Garden's Starter Plant Sale
- Free Household Battery Drop-Off

- Swap your Old 6-Foot, 300 Watt Halogen Floor Lamp* for a New Energy-Efficiency Version for Free (Details at risingsunenergy.org) ***Bring Your PG&E Bill**
- Local Vendors Selling Eco-Friendly Products and Services
- See a Solar Generator in Action

Please join us for a great day honoring our planet, building community, and raising environmental awareness!

Entertainment!

- 2 Stages of Live Entertainment Featuring the Popular Motordude Zydeco Band, Abby & The Pipsqueaks, and Emeryville Taiko Drummers!
- Inflatable Games & Bounce Houses
- Magic Show, Face Painting, & More
- Recycled Arts and Crafts Station by East Bay Depot for Creative Reuse
- 3-on-3 Basketball Tournament

Food!

- Enjoy Emeryville's Culinary Street Food Masters, including:
  * Seoul on Wheels
  * D'Alicia's Taqueria

This is an ADA accessible event. For more information, call 510-596-4366 or visit: www.emeryville.org/earth-day

Emeryville's Earth Day Celebration is brought to you by the City of Emeryville's Community Services Department

EMERYVILLE
Community Services Department

Stormwater Treatment Systems Installed in the City of Emeryville

Site Name	Address	Type of Stormwater Treatment System	Size*	Location	Date Installed
Private Projects					
Emerystation East	59th and Hollis	Vault - Stormfilter	One manhole	South side of building in driveway	May. 2007
Emerystation East	59th and Hollis	Bioswale	Two long sections adjacent to building	West side of building on Peladeau	May. 2007
Emerystation East	59th and Hollis	Bioswale	One short section	North side of building on 59th Street	May. 2007
Emerystation East	59th and Hollis	Intensive Greenroof	Most of Podium level	In middle of building on podium level	May. 2007
Hilton Garden Inn	Frontage and Powell	Bioswale	One medium long section	On East side of driveway off of Powell	Apr. 2007
Avenue 64	64th and Christie	Bioswale	One medium long section	On West side by driveway	Oct. 2007
Glashaus	65th and Hollis	Bioswale	Four medium long sections	Starting on East Side and wrapping around South side	Dec. 2008
Glashaus	65th and Hollis	Pervious Concrete Infiltration Trench	Three medium long sections	Starting on North side of internal drive and wrapping around the west	Dec. 2008
Glashaus	65th and Hollis	Flow Through Planters	Several medium sized planters	On West, East and South side of Large building at 65th and Hollis	Dec. 2008
Doyle Street Condos	Doyle and Stanford	Bioswale	One medium long section	On North side on Stanford	Mar. 2008
West Elm Store	Bay and Shellmound	Extensive Greenroof	Half of roof	On Roof	Feb. 2009
West Elm Store	Bay and Shellmound	Flow Through Planters	Five medium sized planters	On North, East, South and West sides of the building with pump for one section	Feb. 2009
Oakwalk	40th and San Pablo	Flow Through Planters	Four large sized planters	On North and East sides of main building	Feb. 2010
Oakwalk	40th and San Pablo	Flow Through Planters	Many small sized planters	On podium level of main building	Feb. 2010
Oakwalk	40th and San Pablo	Filterra Tree Box Planters	Four small sized tree filter planters	In pairs in parking lot on West side with entrances on 40th and SPA	Feb. 2010
Age Song	40th and Horton	Extensive Greenroof	Two thirds of roof	On Roof	Jan. 2010
Age Song	40th and Horton	Flow Through Planters	Two large sized planters	On Podium level	Jan. 2010
Age Song	40th and Horton	Vault - Sand Filter with Three chambers	Large Three manhole system	In parking garage with entrance off of Horton	Jan. 2010
National Holistic Inst.	59th and Doyle	Flow Through Planters	Four medium sized planters	In surface parking lot on all sides with pump for one section	Apr. 2010
National Holistic Inst.	59th and Doyle	Filterra Tree Box Planter	One small sized tree filter planter	By main entrance on Doyle	Apr. 2010
City Projects					
Greenway	Between Ocean and 67th	Bioswales	Several long sections	In middle of linear park between pedestrian and cycling paths	Jun. 2006
Greenway	Between Powell and 59th	Bioswales	Several long sections	In middle of linear park by pedestrian paths	Jun. 2007
Doyle Hollis Park	62nd and Hollis	Raingardens	Three medium sized planters	One North and South sides of park	Sep. 2009